Models C709/C717

Heat Treatment
Soft Serve Freezers

Original Operating Instructions

062080-M

TAYLOR®

2/4/05 (Original Publication)
(Updated 5/14/12

Complete this page for quick reference when service is required:

Taylor Distributor: _____

Address: _____

Phone: _____

Fax: _____

E-mail: _____

Service: _____

Parts: _____

Date of Installation: _____

Information found on the data label:

Model Number: _____

Serial Number: _____

Electrical Specs: Voltage _____ Cycle _____

Phase _____

Maximum Fuse Size: _____ A

Minimum Wire Ampacity: _____ A

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Taylor Company
750 N. Blackhawk Blvd.
Rockton, IL 61072

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Note: Continuing research results in steady improvements; therefore, information in this manual is subject to change without notice.

Note: Only instructions originating from the factory or its authorized translation representative(s) are considered to be the original set of instructions.

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Rockton, IL 61072

Section 1 To the Installer

The following are general installation instructions. For complete installation details, please see the checkout card.

Installer Safety

In all areas of the world, equipment should be installed in accordance with existing local codes. Please contact your local authorities if you have any questions.

Care should be taken to ensure that all basic safety practices are followed during the installation and servicing activities related to the installation and service of Taylor equipment.

- Only authorized Taylor service personnel should perform installation and repairs on the equipment.
- Authorized service personnel should consult OSHA Standard 29CFRI910.147 or the applicable code of the local area for the industry standards on lockout/tagout procedures before beginning any installation or repairs.
- Authorized service personnel must ensure that the proper PPE is available and worn when required during installation and service.
- Authorized service personnel must remove all metal jewelry, rings, and watches before working on electrical equipment.

The main power supply(s) to the freezer must be disconnected prior to performing any repairs. Failure to follow this instruction may result in personal injury or death from electrical shock or hazardous moving parts as well as poor performance or damage to the equipment.

Note: All repairs must be performed by an authorized Taylor Service Technician.

This unit has many sharp edges that can cause severe injuries.

Site Preparation

Review the area where the unit will be installed before uncrating the unit. Make sure all possible hazards to the user or equipment have been addressed.

For Indoor Use Only: This unit is designed to operate indoors, under normal ambient temperatures of 70°-75°F (21°-24°C). The freezer has successfully performed in high ambient temperatures of 104°(40°C) at reduced capacities.

This unit must **NOT** be installed in an area where a water jet or hose can be used. **NEVER** use a water jet or hose to rinse or clean the unit. Failure to follow this instruction may result in electrocution.

This unit must be installed on a level surface to avoid the hazard of tipping. Extreme care should be taken in moving this equipment for any reason. Two or more persons are required to safely move this unit. Failure to comply may result in personal injury or equipment damage.

Uncrate the unit and inspect it for damage. Report any damage to your Taylor Distributor.

This piece of equipment is made in the USA and has USA sizes of hardware. All metric conversions are approximate and vary in size.

Air Cooled Units

DO NOT obstruct air intake and discharge openings:

C709: A minimum of 6” (152 mm) air space is required on both sides and 0” on the rear.
C717: A minimum of 3” (76 mm) air space is required around all sides. Install the deflector provided to prevent recirculation of warm air.

This will allow for adequate air flow across the condenser. Failure to allow adequate clearance can reduce the refrigeration capacity of the freezer and possibly cause permanent damage to the compressor.

Water Connections

(Water Cooled Units Only)

An adequate cold water supply must be provided with a hand shut-off valve. On the underside of the base pan or on the right side, two 3/8" I.P.S. water connections for inlet and outlet are provided for easy hook-up. 1/2" inside diameter water lines should be connected to the machine. (Flexible lines are recommended, if local codes permit.) Depending on local water conditions, it may be advisable to install a water strainer to prevent foreign substances from clogging the automatic water valve. There will be only one water "in" and one water "out" connection. DO NOT install a hand shut-off valve on the water "out" line! Water should always flow in this order: first, through the automatic water valve; second, through the condenser; and third, through the outlet fitting to an **open trap drain.**

A back flow prevention device is required on the incoming water connection side. Please refer to the applicable National, State, and local codes for determining the proper configuration.

Electrical Connections

In the United States, this equipment is intended to be installed in accordance with the National Electrical Code (NEC), ANSI/NFPA 70-1987. The purpose of the NEC code is the practical safeguarding of persons and property from hazards arising from the use of electricity. This code contains provisions considered necessary for safety. Compliance therewith and proper maintenance will result in an installation essentially free from hazard!

In all other areas of the world, equipment should be installed in accordance with the existing local codes. Please contact your local authorities.

FOLLOW YOUR LOCAL ELECTRICAL CODES!

Each unit requires one power supply for each data label on the unit. Check the data label(s) on the freezer for branch circuit overcurrent protection or fuse, circuit ampacity, and other electrical specifications. Refer to the wiring diagram provided inside of the electrical box for proper power connections.

CAUTION: THIS EQUIPMENT MUST BE PROPERLY GROUNDED! FAILURE TO DO SO CAN RESULT IN SEVERE PERSONAL INJURY FROM ELECTRICAL SHOCK!

This unit is provided with an equipotential grounding lug that is to be properly attached to the rear of the frame by the authorized installer. The installation location is marked by the equipotential bonding symbol (5021 of IEC 60417-1) on both the removable panel and the equipment's frame.

- Stationary appliances which are not equipped with a power cord and a plug or another device to disconnect the appliance from the power source must have an all-pole disconnecting device with a contact gap of at least 3 mm installed in the external installation.
- Appliances that are permanently connected to fixed wiring and for which leakage currents may exceed 10 mA, particularly when disconnected or not used for long periods, or during initial installation, shall have protective devices such as a GFI, to protect against the leakage of current, installed by the authorized personnel to the local codes.
- Supply cords used with this unit shall be oil-resistant, sheathed flexible cable not lighter than ordinary polychloroprene or other equivalent synthetic elastomer-sheathed cord (Code designation 60245 IEC 57) installed with the proper cord anchorage to relieve conductors from strain, including twisting, at the terminals and protect the insulation of the conductors from abrasion.

Beater Rotation

Beater rotation must be clockwise as viewed looking into the freezing cylinder.

Note: The following procedures should be performed by a trained service technician.

To correct rotation on a three-phase unit, interchange any two incoming power supply lines at freezer main terminal block only.

To correct rotation on a single-phase unit, change the leads inside the beater motor. (Follow diagram printed on motor.)

Electrical connections are made directly to the terminal block provided behind the lower front panel.

Refrigerant

In consideration of our environment, Taylor proudly uses only earth friendly HFC refrigerants. The HFC refrigerant used in this unit is R404A. This refrigerant is generally considered non-toxic and non-flammable, with an Ozone Depleting Potential (ODP) of zero (0).

However, any gas under pressure is potentially hazardous and must be handled with caution.

NEVER fill any refrigerant cylinder completely with liquid. Filling the cylinder to approximately 80% will allow for normal expansion.

Use only R134a refrigerant that conforms to the AHI standard 700 specification. The use of any other refrigerant may expose users and operators to unexpected safety hazards.

Refrigerant liquid sprayed onto the skin may cause serious damage to tissue. Keep eyes and skin protected. If refrigerant burns should occur, flush immediately with cold water. If burns are severe, apply ice packs and contact a physician immediately.

Taylor reminds technicians to be cautious of government laws regarding refrigerant recovery, recycling, and reclaiming systems. If you have any questions regarding these laws, please contact the factory Service Department.

WARNING: R404A refrigerant used in conjunction with polyolester oils is extremely moisture absorbent. When opening a refrigeration system, the maximum time the system is open must not exceed 15 minutes. Cap all open tubing to prevent humid air or water from being absorbed by the oil.

Section 2 To the Operator

Your freezer has been carefully engineered and manufactured to give you dependable operation. When properly operated and cared for, it will produce a consistent, quality product. Like all mechanical products, cleaning and maintenance will be required. A minimum amount of care and attention is necessary if the operating procedures outlined in this manual are followed closely.

This Operator's Manual should be read before operating or performing any maintenance on your equipment.

Your Taylor freezer will NOT eventually compensate for and correct any errors during the set-up or filling operations. Thus, the initial assembly and priming procedures are of extreme importance. It is strongly recommended that personnel responsible for the equipment's operation, both assembly and disassembly, go through these procedures together in order to be properly trained and to make sure that no confusion exists.

In the event you should require technical assistance, please contact your local authorized Taylor Distributor.

Note: Warranty is valid only if the parts are authorized Taylor parts, purchased from an authorized Taylor Distributor, and the required service work is provided by an authorized Taylor service technician. Taylor reserves the right to deny warranty claims on equipment or parts if non-approved parts or refrigerant were installed in the machine, system modifications were performed beyond factory recommendations, or it is determined that the failure was caused by neglect or abuse.

Note: Constant research results in steady improvements; therefore, information in this manual is subject to change without notice.

If the crossed out wheeled bin symbol is affixed to this product, it signifies that this product is compliant with the EU Directive as well as other similar legislation in effect after August 13, 2005. Therefore, it must be collected separately after its use is completed, and cannot be disposed as unsorted municipal waste.

The user is responsible for returning the product to the appropriate collection facility, as specified by your local code.

For additional information regarding applicable local laws, please contact the municipal facility and/or local distributor.

Compressor Warranty Disclaimer

The refrigeration compressors on this machine are warranted for the term indicated on the warranty card accompanying this machine. However, due to the Montreal Protocol and the U.S. Clean Air Act Amendments of 1990, many new refrigerants are being tested and developed, thus seeking their way into the service industry. Some of these new refrigerants are being advertised as drop-in replacements for numerous applications. It should be noted that, in the event of ordinary service to this machine's refrigeration system, **only the refrigerant specified on the affixed data label should be used**. The unauthorized use of alternate refrigerants will void your compressor warranty. It will be the owner's responsibility to make this fact known to any technician he employs.

It should also be noted that Taylor does not warrant the refrigerant used in its equipment. For example, if the refrigerant is lost during the course of ordinary service to this machine, Taylor has no obligation to either supply or provide its replacement either at billable or unbillable terms. Taylor does have the obligation to recommend a suitable replacement if the original refrigerant is banned, obsoleted, or no longer available during the five year warranty of the compressor.

Taylor will continue to monitor the industry and test new alternates as they are being developed. Should a new alternate prove, through our testing, that it would be accepted as a drop-in replacement, then the above disclaimer would become null and void. To find out the current status of an alternate refrigerant as it relates to your compressor warranty, call the local Taylor Distributor or the Taylor Factory. Be prepared to provide the Model/Serial Number of the unit in question.

080912

Section 3 Safety

We at Taylor Company are concerned about the safety of the operator when he or she comes in contact with the freezer and its parts. Taylor has gone to extreme efforts to design and manufacture built-in safety features to protect both you and the service technician. As an example, warning labels have been attached to the freezer to further point out safety precautions to the operator.

IMPORTANT - Failure to adhere to the following safety precautions may result in severe personal injury or death. Failure to comply with these warnings may damage the machine and its components. Component damage will result in part replacement expense and service repair expense.

DO NOT operate the freezer without reading this Operator Manual. Failure to follow this instruction may result in equipment damage, poor freezer performance, health hazards, or personal injury.

Per IEC 60335-1 and its part 2 standards, “This appliance is to be used only by trained personnel. It is not intended for use by children or people with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge, unless given supervision or instruction concerning the use of the appliance by a person responsible for their safety.”

This unit is provided with an equipotential grounding lug that is to be properly attached to the rear of the frame by the authorized installer. The installation location is marked by the equipotential bonding symbol (5021 of IEC 60417-1) on both the removable panel and the equipment's frame.

DO NOT use a water jet to clean or rinse the freezer. Failure to follow these instructions may result in serious electrical shock.

- **DO NOT** operate the freezer unless it is properly grounded.
- **DO NOT** operate the freezer with larger fuses than specified on the freezer data label.
- All repairs must be performed by an authorized Taylor service technician. The main power supplies to the machine must be disconnected prior to performing any repairs.
- Cord Connected Units: Only Taylor authorized service technicians may install a plug on this unit.
- Stationary appliances which are not equipped with a power cord and a plug or another device to disconnect the appliance from the power source must have an all-pole disconnecting device with a contact gap of at least 3mm installed in the external installation.
- Appliances that are permanently connected to fixed wiring and for which leakage currents may exceed 10 mA, particularly when disconnected or not used for long periods, or during initial installation, shall have protective devices such as a GFI, to protect against the leakage of current, installed by the authorized personnel to the local codes.
- Supply cords used with this unit shall be oil-resistant, sheathed flexible cable not lighter than ordinary polychloroprene or other equivalent synthetic elastomer-sheathed cord (Code designation 60245 IEC 57) installed with the proper cord anchorage to relieve conductors from strain, including twisting, at the terminals and protect the insulation of the conductors from abrasion.

Failure to follow these instructions may result in electrocution. Contact your local authorized Taylor Distributor for service.

- **DO NOT** allow untrained personnel to operate this machine.
- **DO NOT** operate the freezer unless all service panels and access doors are restrained with screws.
- **DO NOT** remove any internal operating parts (example: freezer door, beater, scraper blades, etc.) unless all control switches are in the OFF position.

Failure to follow these instructions may result in severe personal injury from hazardous moving parts.

This unit has many sharp edges that can cause severe injuries.

- **DO NOT** put objects or fingers in the door spout. This may contaminate the product and cause severe personal injury from blade contact.
- **USE EXTREME CAUTION** when removing the beater asssembly. The scraper blades are very sharp.
- **CAUTION-SHARP EDGES:** Two people are required to handle the cup/cone dispenser. Protective gloves must be worn and the mounting holes must NOT be used to lift or hold the dispenser. Failure to follow this instruction can result in personal injury to fingers or equipment damage.

This freezer must be placed on a level surface. Failure to comply may result in personal injury or equipment damage.

Cleaning and sanitizing schedules are governed by your state or local regulatory agencies and must be followed accordingly. Please refer to the cleaning section of this manual for the proper procedure to clean this unit.

DO NOT obstruct air intake and discharge openings:

C709: A minimum of 6” (152 mm) air space is required on both sides and 0” on the rear.

C717: A minimum of 3” (76 mm) air space is required around all sides. Install the deflector provided to prevent recirculation of warm air.

Failure to follow these instructions may cause poor freezer performance and damage to the machine.

For Indoor Use Only: This unit is designed to operate indoors, under normal ambient temperatures of 70° - 75°F (21° - 24°C). The freezer has successfully performed in high ambient temperatures of 104°(40°C) at reduced capacities.

NOISE LEVEL: Airborne noise emission does not exceed 78 dB(A) when measured at a distance of 1.0 meter from the surface of the machine and at a height of 1.6 meters from the floor.

Section 4 Operator Parts Identification

Model C709

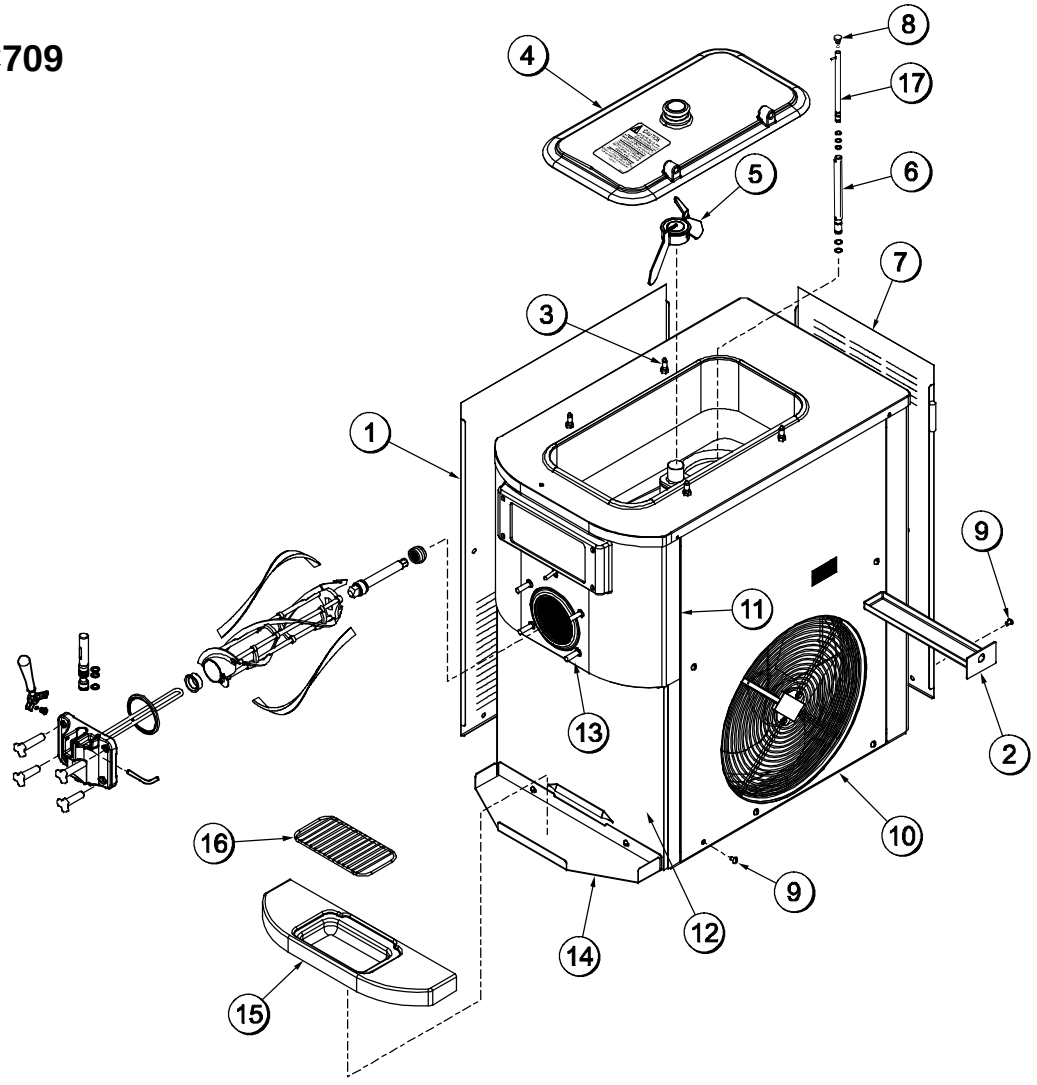


Figure 1

ITEM	DESCRIPTION	PART NO.
1	PANEL-SIDE-LEFT	056963-SP1
2	PAN-DRIP 11-5/8 LONG	027503
3	PIN-RETAINING-HOPPER CVR	043934
4	KIT A.-COVER-HOPPER	X65368
5	BLADE A.-AGITATOR	X56591
6	TUBE A.-FEED-OUTER-HT	X34641
7	PANEL-REAR	056077-SP1
8	ORIFICE	022465-100
9	SCREW-1/4-20X3/8 RHM-SS	011694

ITEM	DESCRIPTION	PART NO.
10	PANEL A-SIDE-RIGHT	X57871
11	PANEL A.-FRONT-UPPER	X59423
12	PANEL A.-FRONT-LOWER	X58955
13	STUD-NOSE CONE	055987
14	SHELF-TRAY-DRIP	056076
15	TRAY-DRIP	056858
16	SHIELD-SPLASH	049203
17	TUBE A.-FEED-SC-INNER	X32824-2

Model C709 Single Spout Door and Beater Assembly

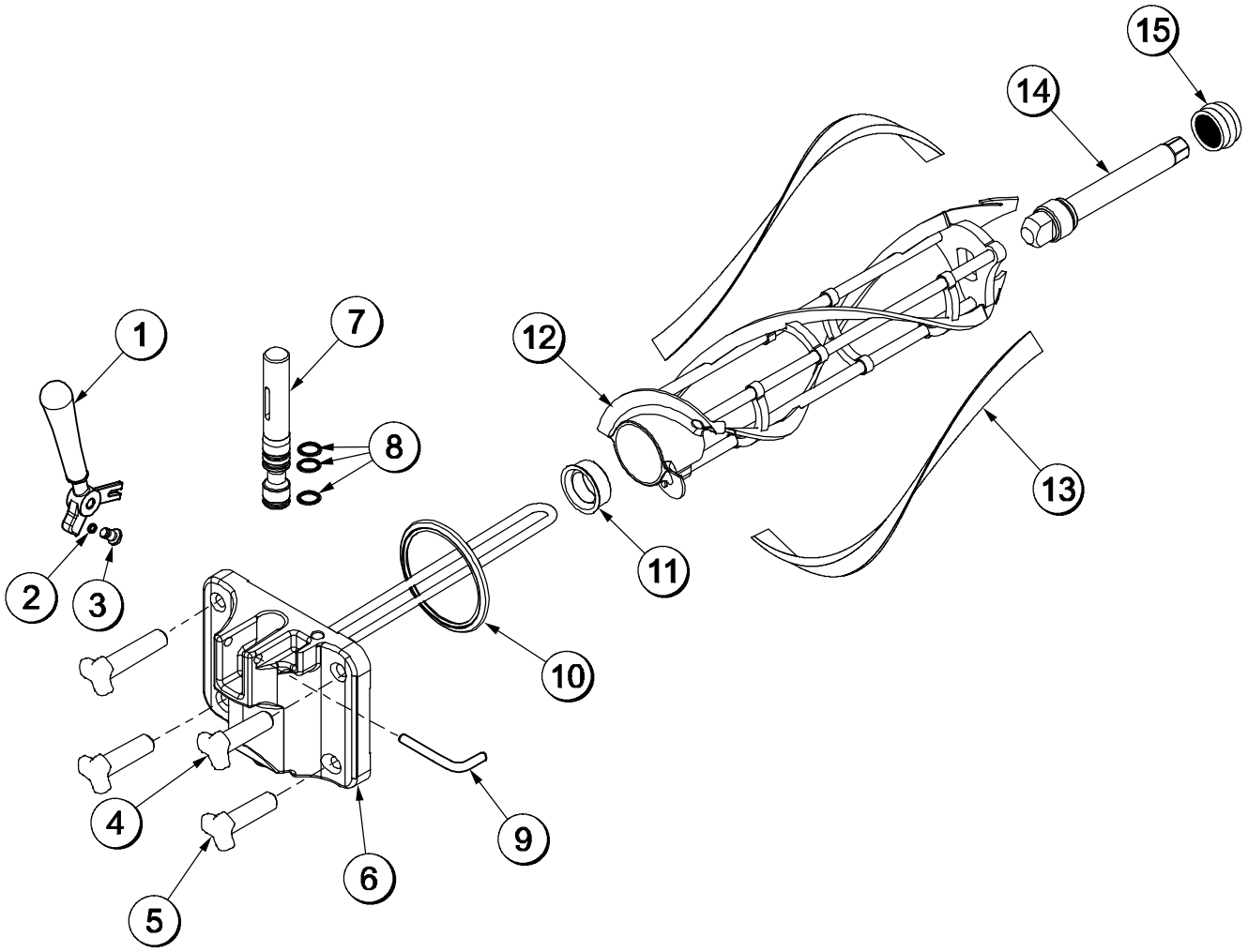


Figure 2

ITEM	DESCRIPTION	PART NO.
1	HANDLE A.-DRAW-WELDED	X56246
2	O-RING-1/4 OD X .070W 50	015872
3	SCREW-ADJUSTMT-5/16-24	056332
4	NUT-STUD BLACK 3.250”	058765
5	NUT-STUD BLACK 2.563“	058764
6	DOOR A.-W/BAFFLE	X57332-SER
7	VALVE A.-DRAW	X55820
8	O-RING-DRAW VALVE-S.S.	014402

ITEM	DESCRIPTION	PART NO.
9	PIN-HANDLE-SS	055819
10	GASKET-DOOR HT 4”-DBL	048926
11	BEARING-FRONT	050216
12	BEATER A.-3.4 QT HELICORE	X31761
13	BLADE-SCRAPER-PLASTIC	035174
14	SHAFT-BEATER	056078
15	SEAL-DRIVE SHAFT	032560

Model C717

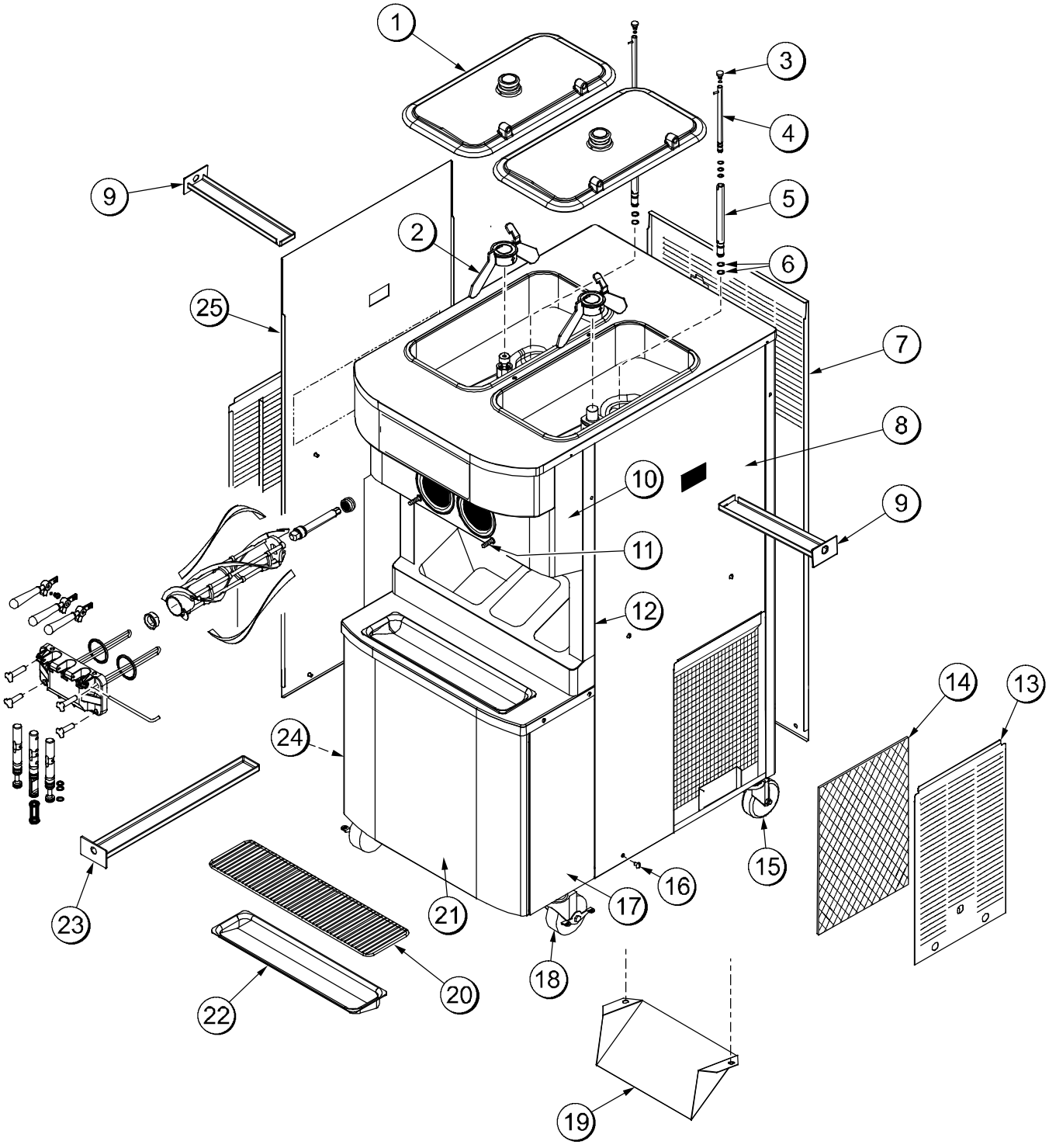


Figure 3

Model C717 Exploded View Parts Identification

ITEM	DESCRIPTION	PART NO.
1	COVER-HOPPER	053809-1
2	BLADE A.-AGITATOR	X56591
3	ORIFICE	022465-100
4	TUBE A.-FEED-SC-INNER-3/16	X32824-3
5	TUBE A.-FEED-OUTER-HT	X34641
6	O-RING-.643 OD X .077 W	018572
7	PANEL-REAR	059917
8	PANEL-SIDE*RIGHT	059907
9	PAN-DRIP 12.5	059736
10	PANEL A.-FRONT (MIDDLE)	X63879
11	PANEL A.-FRONT (UPPER)	X59836
12	STUD-NOSE CONE	055987
13	FILTER-AIR-POLY-FLO	052779-11

ITEM	DESCRIPTION	PART NO.
14	PANEL A.-FILTER-LOUVERED	X59928
15	CASTER-4” SWV 3/4-10 STEM	044106
16	SCREW-1/4-20 X 3/8 RHM-SS	011694
17	PANEL-CORNER-FRONT RIGHT	063087
18	CASTER-4” SWV 3/4-10 STEM W/BRAKE	046437
19	DEFLECTOR-BLOWER	059929
20	SHIELD-SPLASH-WIRE-19-3/4 L	033813
21	PANEL A.-FRONT LOWER	X59854-SER
22	TRAY-DRIP-19-5/8 L X 4-7/8	033812
23	PAN-DRIP 19-1/2 LONG	035034
24	PANEL-CORNER-FRONT-LEFT	063088
25	PANEL-SIDE-LEFT	059906

Model C717 Three Spout Door and Beater Assembly

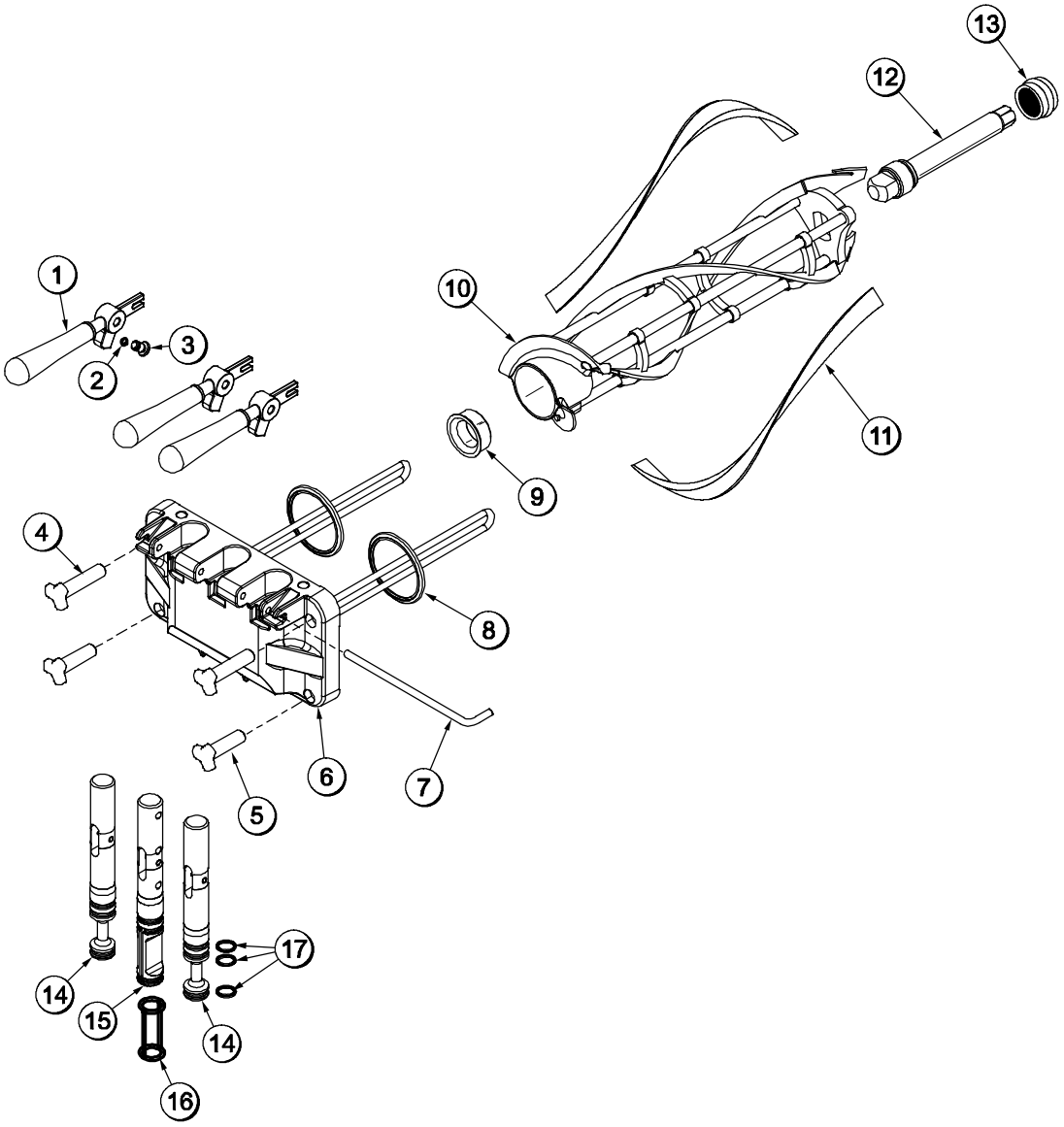


Figure 4

ITEM	DESCRIPTION	PART NO.
1	HANDLE A.-DRAW-WELDED	X56421-1
2	O-RING-1/4 OD X .070W 50	015872
3	SCREW-ADJUSTMENT-5/16-24	056332
4	NUT-STUD BLACK 3.250 LONG	058765
5	NUT-STUD BLACK 2.563 LONG	058764
6	DOOR A.-*LG BAF*W/O PRG	X59924-SER
7	PIN-HANDLE-TWIN	059894
8	GASKET-DOOR HT 4”-DOUBLE	048926-1
9	BEARING-FRONT	050216

ITEM	DESCRIPTION	PART NO.
10	BEATER A.-3.4QT-HELICORE	X31761
11	BLADE-SCRAPER-PLASTIC 17	035174
12	SHAFT-BEATER	032564
13	SEAL-DRIVE SHAFT	032560
14	VALVE A.-DRAW-L&R	X59888
15	VALVE A.-DRAW-CENTER	X59890
16	SEAL-DRAW VALVE	034698
17	O-RING-7/8 OD X .103W	014402

Feed Tube Assembly

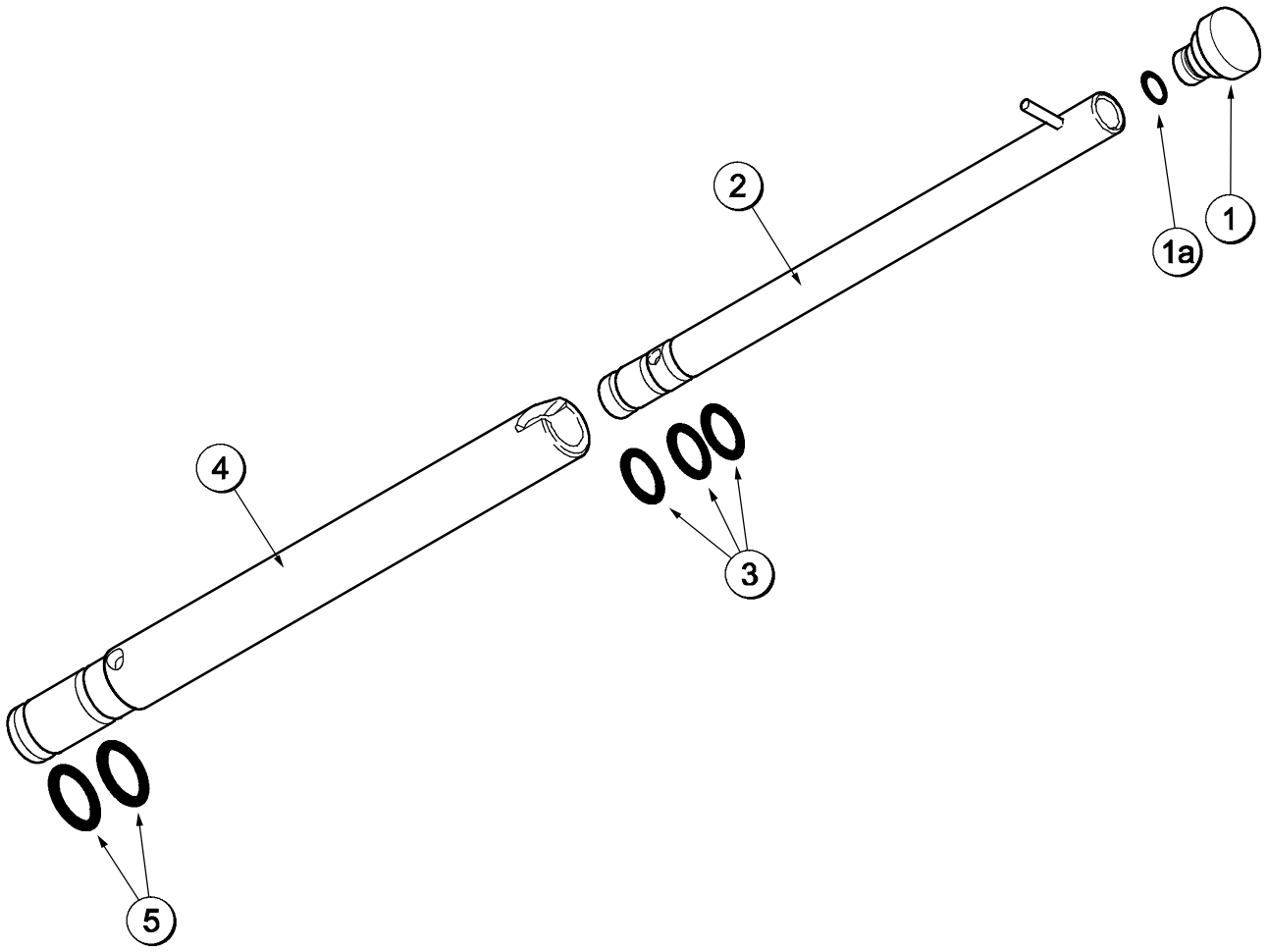


Figure 5

ITEM	DESCRIPTION	PART NO.
1	AIR ORIFICE	022465-100
1a	O-RING	016137
2	TUBE A.-FEED-SC-INNER (C709)	X32824-2
	TUBE A.-FEED-SC-INNER (C717)	X32824-3

ITEM	DESCRIPTION	PART NO.
3	O-RING - .291 ID x .080 W	018550
4	TUBE A.-FEED-OUTER-HT	X34641
5	O-RING- .643 OD x .077 W	018572

Accessories

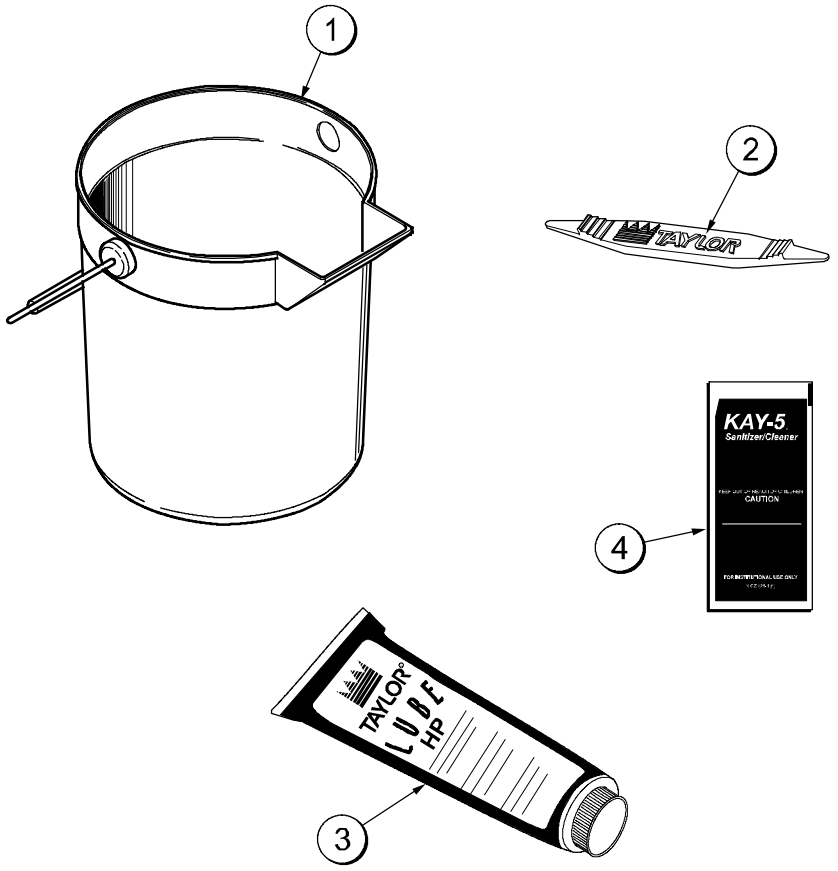


Figure 6

ITEM	DESCRIPTION	PART NO.
1	PAIL-MIX 10 QT.	013163
2	TOOL-O-RING REMOVAL	048260-WHT
3	LUBRICANT-TAYLOR HI-PERF	048232

ITEM	DESCRIPTION	PART NO.
*4	SANITIZER KAY-5 25 PACKS	SEE NOTE
**5	KIT A.-TUNE-UP (C709)	X49463-58
	KIT A.-TUNE-UP (C717)	X49463-79

***Note:** A sample container of sanitizer is sent with the unit. For reorders, order Kay-5 part no. 041082 (200 packs) or Stera Sheen part no. 055492 (100 2 oz. packs).

**Not Shown

Brushes

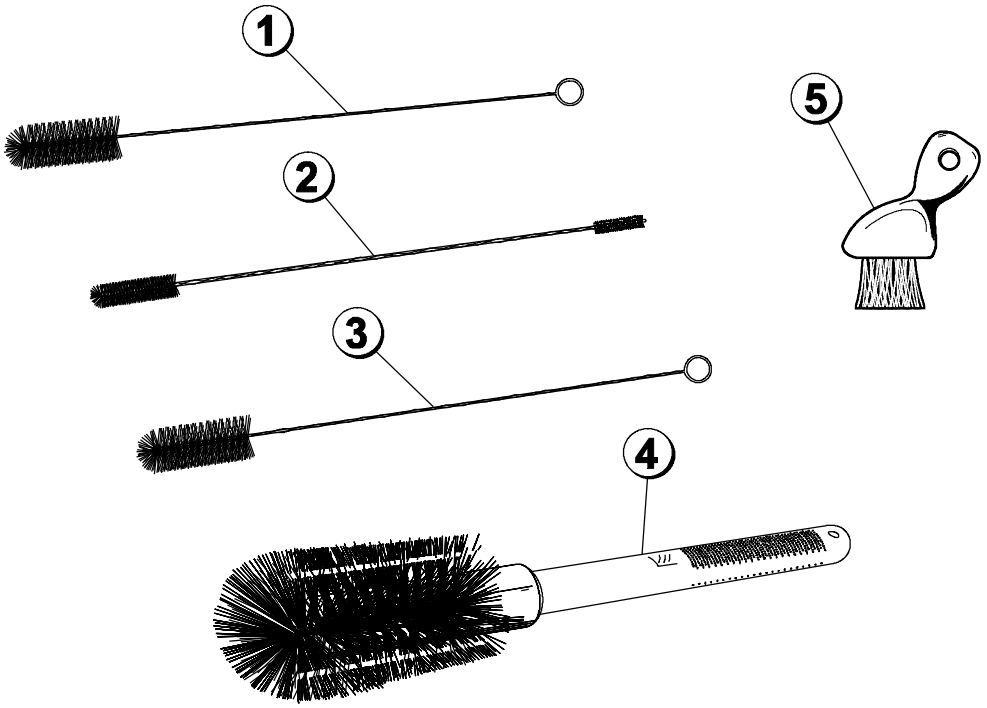


Figure 7

ITEM	DESCRIPTION	PART NO.
1	BRUSH-REAR BRG 1” D X 2” L	013071
2	BRUSH-DOUBLE ENDED	013072
3	BRUSH-DRAW VALVE 1”OD X 2	013073

ITEM	DESCRIPTION	PART NO.
4	BRUSH-MIX PUMP BODY 3” X 7”	023316
5	BRUSH-END-DOOR-SPOUT-SS	039719

Section 5 Important: To the Operator

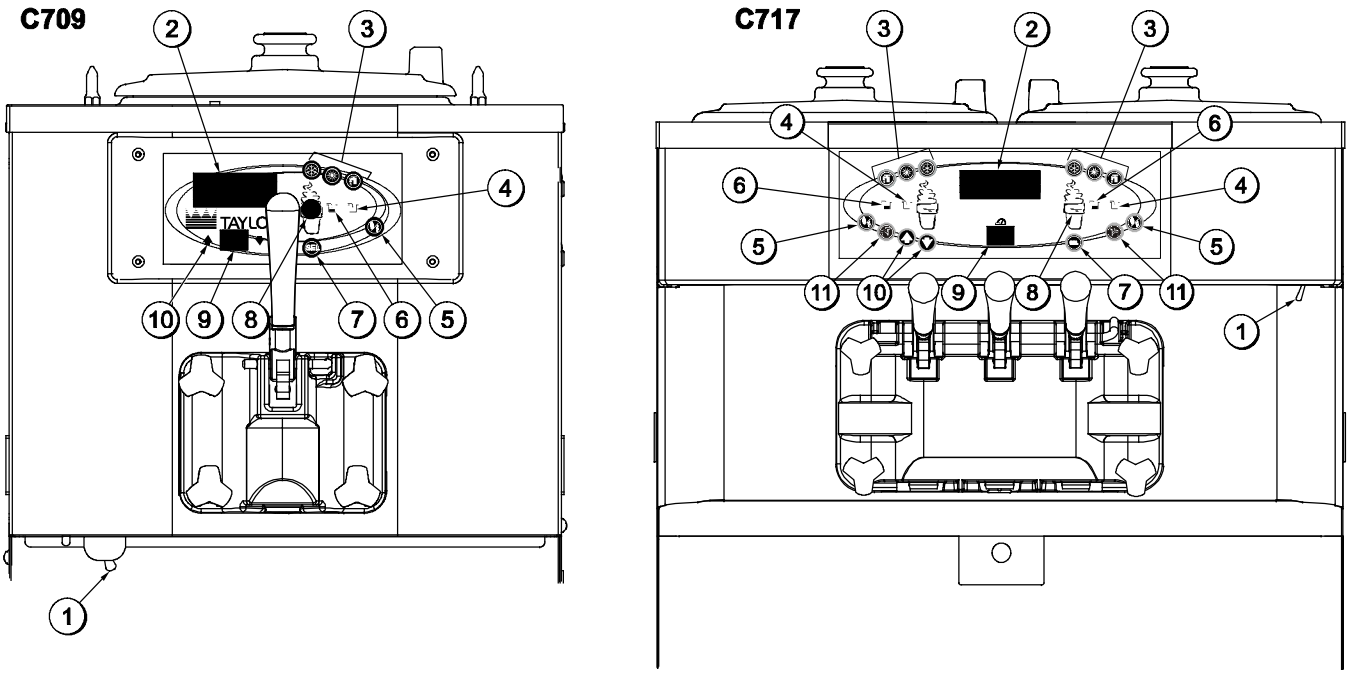


Figure 8

ITEM	DESCRIPTION
1	POWER SWITCH
2	LIQUID CRYSTAL DISPLAY
3	KEYPADS
4	MIX OUT INDICATOR
5	STANDBY KEY
6	MIX LOW INDICATOR
7	SELECT KEY
8	SERVICE MENU KEY
9	BRUSH CLEAN COUNTER
10	ARROW KEYS
11	TOPPING HEATER KEY

Symbol Definitions

To better communicate in the International arena, symbols have replaced words on many of our operator switches, function, and fault indicators. Your Taylor equipment is designed with these International symbols.

The following chart identifies the symbol definitions.

= SELECT

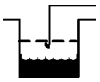
= UP ARROW

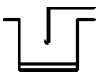
= DOWN ARROW

= AUTO

= HEAT CYCLE

= WASH


= MIX LOW


= MIX OUT

= MENU DISPLAY

= STANDBY

Power Switch

When placed in the ON position, the power switch allows control panel operation.

Fluorescent Display

The fluorescent display is located on the front control panel. During normal operation the display is blank. The display is used to show menu options and notifies the operator if a fault is detected. On International models, the display will indicate the temperature of the mix in the hopper.

Indicator Lights

MIX LOW - When the MIX LOW symbol is illuminated, the mix hopper has a low supply of mix and should be refilled as soon as possible.

MIX OUT - When the MIX OUT symbol is illuminated, the mix hopper has been almost completely exhausted and has an insufficient supply of mix to operate the freezer. At this time, the AUTO mode is locked out and the freezer will be placed in the STANDBY mode. To initiate the refrigeration system, add mix to the mix hopper and touch the AUTO symbol. The freezer will automatically begin operation.

HEAT MODE - When the HEAT MODE symbol is illuminated, the freezer is in the process of a heat cycle.

BRUSH CLEAN COUNTER - When the BRUSH CLEAN COUNTER display has counted down to “1”, the machine must be disassembled and brush cleaned within 24 hours.

Standby Symbol

The Standby feature maintains product temperatures in both the hopper and the freezing cylinder below 40°F (4.4°C). This feature is useful during long “No Sale” periods to prevent overbeating and product breakdown.

To activate STANDBY, enter the Manager Menu access code (see page 22.) Remove the air orifice and turn the inner feed tube so the pin rests on top of the outer feed tube. When STANDBY is selected, the STANDBY symbol illuminates, indicating the Standby feature has been activated. In the STANDBY mode, the WASH and AUTO functions are automatically cancelled.

To resume normal operation, press the AUTO symbol ❄. When the unit cycles off, the product in the freezing cylinder will be at serving viscosity. At this time, turn the inner feed tube so the pin fits into the groove of the outer feed tube. Install the air orifice.

Wash Symbol

The WASH symbol will illuminate when it is touched. This indicates beater motor operation. The STANDBY or AUTO modes must be cancelled first to activate the WASH mode.

Auto Symbol

The AUTO symbol ❄ will illuminate when it is touched. This indicates that the refrigeration system has been activated. In the AUTO mode, the WASH or STANDBY functions are automatically cancelled.

Note: An indicating light and an audible tone will sound whenever a mode of operation has been selected. To cancel any function, touch the key again. The light and the mode of operation will shut off.

Reset Mechanism

The C709 reset button is located in the service panel on the left side of the machine. The C717 reset buttons are located in the rear panel of the machine.

Reset button(s) protect the beater motor(s) from an overload condition. Should an overload occur, the reset mechanism will trip. To properly reset the freezer, place the power switch in the OFF position. Press the reset button firmly. Turn the power switch to the ON position. Touch the WASH symbol and observe the freezer's performance.

Note: To clear the fault, refer to page 22.

WARNING: Do not use metal objects to press the reset button. Failure to comply may result in severe personal injury or death.

If the beater motor is turning properly, touch the WASH symbol to cancel the cycle. Touch the AUTO symbol ❄ to resume normal operation. If the freezer shuts down again, contact your authorized service technician.

Adjustable Draw Handle

These units feature an adjustable draw handle(s) to provide the best portion control, giving a better, consistent quality to your product and controlling costs. The draw handle(s) should be adjusted to provide a flow rate of 5 to 7-1/2 oz. (142 to 213 g.) of product by weight per 10 seconds. To INCREASE the flow rate, turn the screw CLOCKWISE, and COUNTERCLOCKWISE to DECREASE the flow rate.

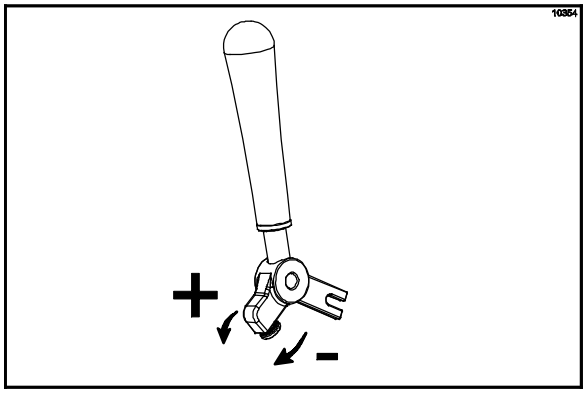


Figure 9

Operating Screen Descriptions

The fluorescent display located in the center of the control panel is normally blank during the daily operation of the machine. The display is activated when the SEL symbol or the Manager's Menu is selected. The display screen will also alert the operator of specific faults detected by the control.

Note: The following operating screen examples will be displayed as they appear on a C709. The C717 will display information for the second freezing cylinder.

Power Up

When the machine is powered the control system will initialize to perform a system check. The screen will display “INITIALIZING”. There will be four types of data the system will check: LANGUAGE, SYSTEM DATA, CONFIG DATA, and LOCKOUT DATA.

During the INITIALIZING... LANGUAGE screen, the alarm will be on. If the system detects corrupt data during INITIALIZING, the following display will alert the operator that the control settings may have been changed.

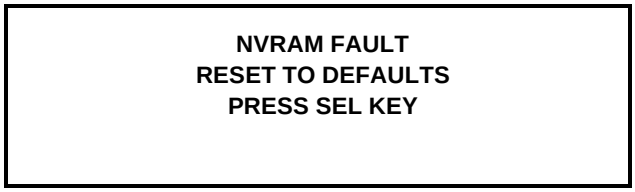


Figure 10

See “NVRAM FAULT” for instructions if the above message appears on the screen.

Once the system has initialized, the number of days remaining before the next required brush cleaning is indicated on the control panel and the SAFETY TIMEOUT screen is displayed with the alarm turned on.

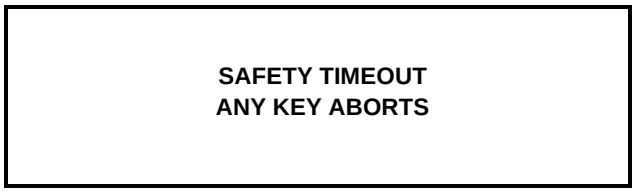


Figure 11

The SAFETY TIMEOUT screen will be displayed with the alarm on, for 60 seconds or until any control symbol is selected.

After the safety timeout has been completed and the power switch is OFF, the following screen is displayed.

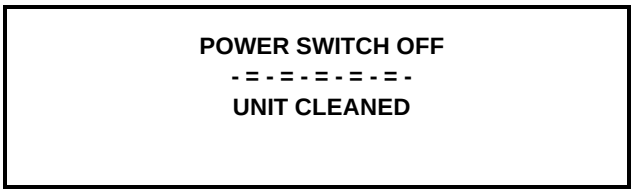


Figure 12

Power Switch ON

When the power switch is placed in the ON position, the control panel touch keys become operative. The fluorescent display will be either blank or indicate that the unit has been cleaned.

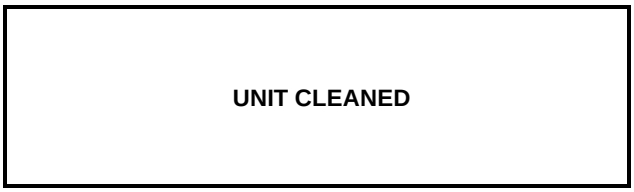


Figure 13

Heat Cycle

The HEAT symbol ✳ on the control panel is illuminated throughout the heat treatment cycle. Two warning messages will be displayed on the screen. “DO NOT DRAW” will be displayed when the mix temperature is below 130°F (54.4°C).

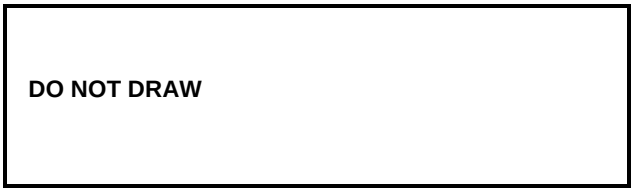


Figure 14

When the temperature of the mix is above 130°F (54.4°C) the screen will display a message indicating that HOT PRODUCT is in the machine.

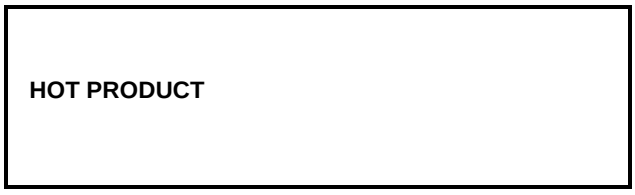


Figure 15

DO NOT attempt to draw product or disassemble the unit during the HEAT cycle. The product is hot and under extreme pressure.

In the HEAT cycle, the mix temperature in the hopper and freezing cylinder must be raised to 151°F (66.1°C) within 90 minutes.

When the heating phase is complete, the freezer goes into the holding phase of the cycle. The holding phase will keep the temperature above 151°F (66.1°C) for a minimum of 35 minutes.

The final phase of the heat treatment cycle is the cooling phase. The freezer must cool the mix below 41°F (5°C) within 90 minutes.

When the entire heat cycle has been completed, the HEAT symbol ✳ will no longer be illuminated. The machine will enter the STANDBY mode (STANDBY symbol illuminates). The machine can be placed in AUTO or left in STANDBY.

To comply with health codes, heat treatment system freezers **must** complete a heat treatment cycle daily, and **must** be disassembled and brush cleaned a minimum of every 14 days. Brush cleaning is the normal disassembly and cleaning procedure found in this manual. Failure to follow these guidelines will cause the control to lock the freezer out of the AUTO mode.

Always comply with local guidelines for the maximum number of days allowed between brush clean cycles. (See the Manager's Menu for setting the Brush Clean interval, on page 25.)

International Models Only:

Some International models will continuously display the temperature of each mix hopper when the power switch is in the ON position. (See Figure 16.)

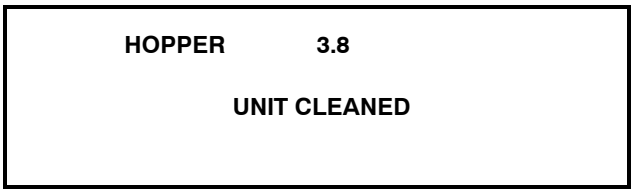


Figure 16

If the control is set for international configuration, the following screen will appear when the heat symbol is touched and the machine is in the AUTO or STANDBY mode. (See Figure 17.)

Figure 17

Use the up or down arrow symbol to move the cursor to “YES”. Press the SEL symbol to immediately start a heat cycle.

If the control is set for international configuration, it is possible to select STANDBY by pressing the STANDBY symbol without entering the Manager’s Menu.

Freezer Locks

There are two types of freezer lock conditions that can occur: Hard Lock or Soft Lock. A Hard Lock requires the machine be disassembled and brush cleaned. A Soft Lock can be corrected by either disassembling and brush cleaning the machine, or by starting another heat treatment cycle.

Hard Lock: There are two causes of a hard lock failure:

1. **The brush clean timer has elapsed (maximum setting of 14 days).**

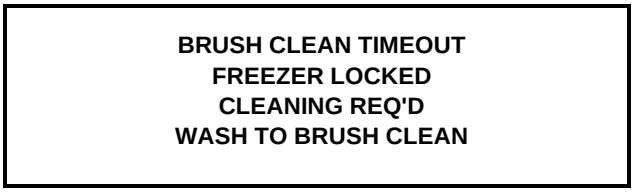


Figure 18

Selecting the WASH symbol will display the following screen.

Figure 19

2. There has been a thermistor failure (freezing cylinder or hopper) during the heat treatment process.

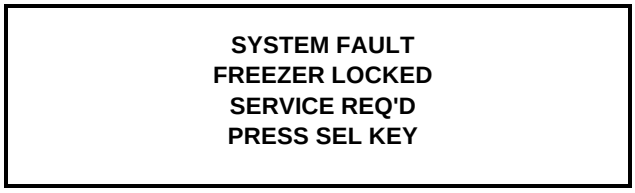


Figure 20

Selecting the SEL symbol will indicate which thermistor caused the Hard Lock.

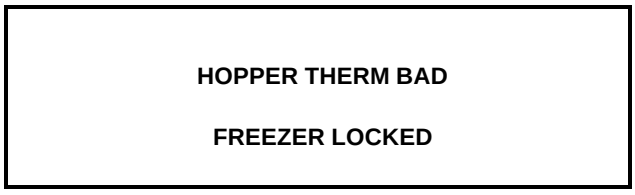


Figure 21

If the machine has hard locked and an attempt is made to enter AUTO, the machine will enter the STANDBY mode and display the following message.

Figure 22

To restore the message that identified the reason for the hard lock, turn the power switch OFF for five seconds and then return the power switch to the ON position. The original message with the reason for the Hard Lock will be displayed. The FAULT DESCRIPTION can also be found in the Manager's Menu (See page 26.)

The FREEZER LOCKED message will remain on the display until the brush clean requirements are fulfilled. The freezer must be disassembled in order to activate the five minute timer on the display screen. Once the timer counts down to zero, the lockout is cleared.

Soft Lock: If a heat treatment cycle has not been initiated within the last 24 hours, a soft lock failure will occur. A soft lock allows the operator to correct the cause of the soft lock. The operator has the option of either starting another heat cycle or brush cleaning the machine. When a soft lock occurs, the machine will go into the STANDBY mode. The following message is displayed on the screen. The reason for the soft lock is indicated on the second line.

Figure 23

If the reason for the soft lock has been corrected, selecting the HEAT symbol initiates a Heat Cycle immediately. Selecting the WASH symbol when the above message is displayed will hard lock the machine and brush cleaning will be necessary.

Following are the variable messages for soft lock failures that appear on the second line of the screen.

POWER SWITCH OFF	Power switch was in the OFF position.
MIX OUT PRESENT	There was a mix out condition present.
AUTO OR STANDBY OFF	The machine was not in the AUTO or STANDBY mode.
NO HEAT CYCLE TRIED	A heat treatment cycle was not attempted in the last 24 hours. (AUTO HEAT TIME was advanced,a power loss was experienced at the time the cycle was to occur, or a heat cycle failure not due to a thermistor failure.)

If the following screen appears, a soft lock has occurred during the heat treatment cycle.

HEAT TREAT FAILURE
FREEZER LOCKED
HEAT FOR HEAT CYCLE
WASH TO BRUSH CLEAN

Figure 24

A soft lock can also occur any time during operation when the hopper or freezing cylinder temperature rises above 59°F (15°C), if the temperature rises and remains above 45°F(7°C) for one hour, or rises and remains above 41°F(5°C) for more than four hours. If a PRODUCT OVER TEMPERATURE condition occurs during operation, the following screen will appear.

PRODUCT OVER TEMP

HEAT FOR HEAT CYCLE
WASH TO BRUSH CLEAN

Figure 25

When one of these messages appears, automatic freezer operation cannot take place until the freezer is disassembled and brush cleaned, or has completed a heat treatment cycle. Select the HEAT symbol ✳ to start a heat cycle, or select the WASH symbol to disassemble and brush clean the machine.

Once the freezer is unlocked by starting a heat treatment cycle the HEAT symbol ✳ will illuminate and the following message will be displayed on the screen.

DO NOT DRAW

Figure 26

If the WASH symbol is selected to clear the lockout by brush cleaning the machine, the FREEZER LOCKED message will remain on the display until the brush clean requirements are fulfilled. The freezer must be disassembled in order to activate the five minute timer on the display screen. Once the timer counts down to zero, the lockout is cleared.

FREEZER LOCKED

Figure 27

To restore the message that identified the reason for the soft lock, turn the power switch OFF for five seconds, and then return the power switch to the ON position. The original message with the reason for the soft lock will be displayed.

HEAT TREAT FAILURE
REASON
HEAT FOR HEAT CYCLE
WASH TO BRUSH CLEAN

Figure 28

The FAULT DESCRIPTION can also be found in the Manager's Menu.

Note: A record of Heat Cycle Data and Lock Out History can be found in the Manager's Menu. (See page 27.)

Manager's Menu

The Manager's Menu is used to enter the operator function displays. To access the Menu, touch the center of the CONE symbol on the control panel. The arrow symbols, the SEL symbol and the CONE symbol will be lit when the ACCESS CODE screen is displayed.

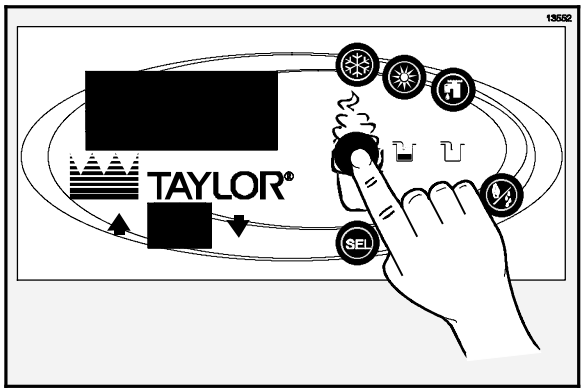


Figure 29

In the Menu program, the arrow symbols and the SEL symbol will function as menu keys.

UP ARROW - increases the value above the cursor and is used to scroll upward in text displays.

DOWN ARROW - decreases the value above the cursor and is used to scroll downward in text displays.

SEL - advances the cursor position to the right and is used to select menu options.

Note: The machine will continue operation in the mode it was in when the Menu was selected. However, the control keys will not be lit and are non-functional when the Manager's Menu is displayed. The control keys are functional in the Manager's Menu when the CURRENT CONDITIONS screen is displayed. (See CURRENT CONDITIONS on page 28.)

Entering Access Code

With the ACCESS CODE screen on the display use the SEL symbol to set the first code number in the cursor position. When the correct number is selected, touch the SEL symbol to move the cursor to the next number position.

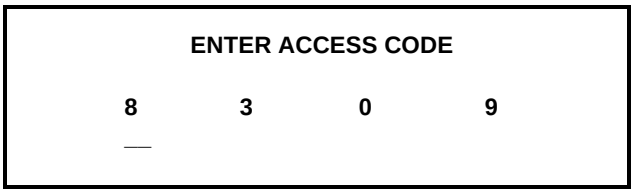


Figure 30

Continue to enter the proper access code numbers (8309) until all four numbers are displayed, then touch the SEL symbol . The Manager's menu list will display on the screen provided the correct access code is entered.

If an incorrect number is entered for the access code, the display will exit the Menu program when the SEL symbol is selected.

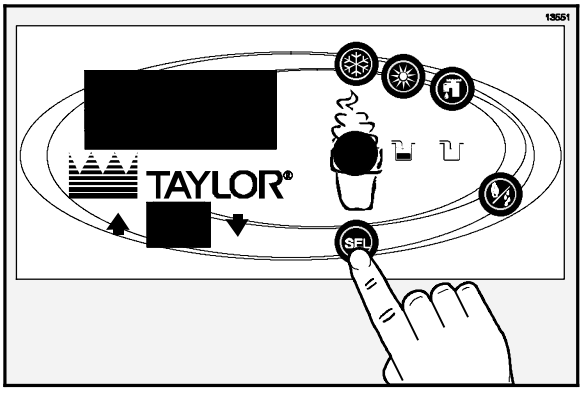


Figure 31

Menu Options

Touch the ARROW symbols to move up or down through the Menu. Select a Menu option by touching the SEL symbol. Exit the Menu program by selecting EXIT FROM MENU or touch the CONE symbol .

The following menu options are listed in the Manager's Menu.

EXIT FROM MENU
RESET DRAW COUNTER
SET CLOCK
AUTO HEAT TIME
AUTO START TIME
STANDBY MODE
BRUSH CLEAN CYCLE (C717 only)
MIX LEVEL AUDIBLE
FAULT DESCRIPTION
LOCKOUT HISTORY
HEAT CYCLE SUMMARY
HEAT CYCLE DATA
SYSTEM INFORMATION
CURRENT CONDITIONS

Selecting “EXIT FROM MENU” will exit the Manager's Menu and the return the control panel symbols to normal operation.

The SERVING COUNTER screen is used to check or reset the number of servings dispensed from the machine. The SERVING COUNTER will automatically reset to zero when the machine is brush cleaned.

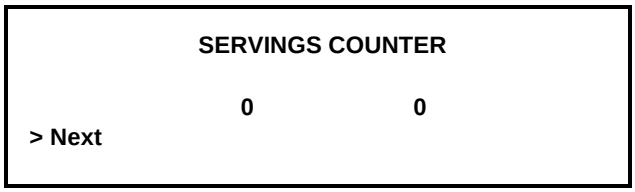


Figure 32

Reset the SERVING COUNTER by selecting the SEL symbol to advance to the next screen. Select the UP arrow symbol to move the arrow (>) to YES and select the SEL symbol. The servings counter will reset to zero and exit back to the Manager's Menu.

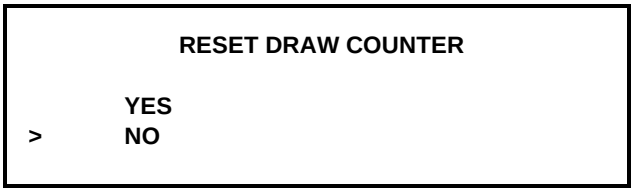


Figure 33

The SET CLOCK option allows the Manager to adjust the control clock date and time. The date and time may only be changed after the freezer has been manually cleaned but before it has been placed in the AUTO or STANDBY mode. The following message will be displayed if the SET CLOCK option is selected when the machine is not in a brush clean state.

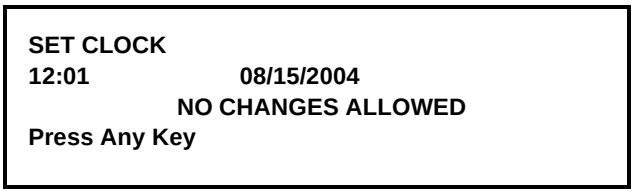


Figure 34

To change the date or time, select the SET CLOCK option in the menu. Touch the UP arrow symbol to advance the arrow from Exit to Change, then touch the SEL symbol to select the Change option.

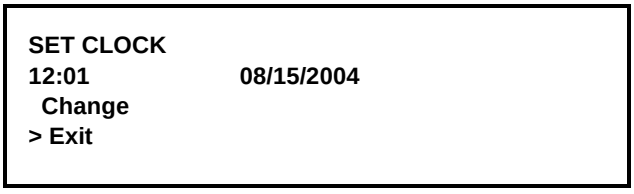


Figure 35

Change the time by touching the UP arrow with the cursor under the hour position. Move the cursor to the minutes by touching the SEL symbol. Once the correct minutes are entered, touch the SEL symbol to advance the cursor to the month.

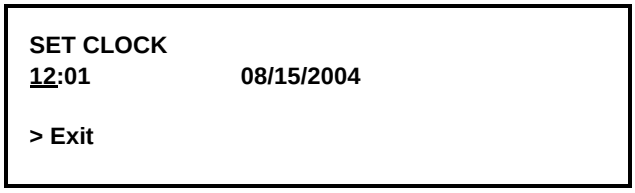


Figure 36

Enter the correct month, day, and year. Then touch the SEL symbol to advance to the DAYLIGHT SAVING TIME screen.

Figure 37

The Daylight Saving feature when enabled, will automatically adjust the control clock for daylight saving time. To Disable the Daylight Saving Time feature, select the UP arrow to move the arrow to Disable. Then touch the SEL symbol to save the new setting.

The AUTO HEAT TIME screen allows the Manager to set the time of day in which the heat treatment cycle will start.

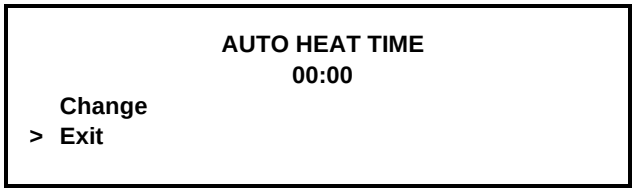


Figure 38

To set the AUTO HEAT TIME select the UP arrow symbol to move the arrow to Change. Then touch the SEL symbol. The screen will display the time with the cursor under the hour position.

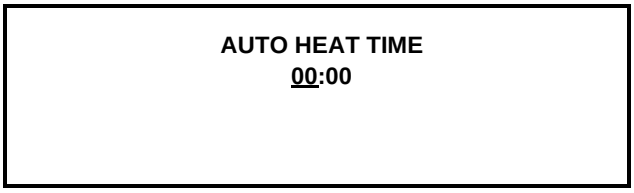


Figure 39

Select the arrow symbols to increase or decrease the hour to the desired setting. Then move the cursor to the minutes position by touching the SEL symbol. Adjust the setting for minutes, then select the SEL symbol to save the setting and return to the AUTO HEAT TIME screen. Select the SEL symbol to exit the screen and return to the Menu.

The AUTO START TIME option allows the Manager to set the time of day at which the machine automatically enters the AUTO mode from the STANDBY mode. The machine must be in the STANDBY mode without a freezer lock condition in order to AUTO start at the programmable time. The AUTO START TIME can also be Disabled and require starting the AUTO mode manually.

Figure 40

Enable the AUTO START TIME by selecting the UP arrow symbol to move the arrow up to Enable. Touch the SEL symbol to advance to the next screen.

Figure 41

Program the AUTO START TIME by selecting the UP arrow symbol to move the arrow to Change. Touch the SEL symbol to advance to the next screen.

Figure 42

Use the arrow symbols to program the AUTO START TIME by increasing or decreasing the hour setting above the cursor. Touch the SEL symbol to advance the cursor and program the minutes setting. Select the SEL symbol to return to the previous screen with the new time setting displayed. Select the SEL symbol to exit the screen and return to the Menu.

The STANDBY option is used to manually place the machine in the standby mode during long, no draw periods. Select the STANDBY screen from the Menu. Touch the SEL symbol to activate Standby.

Discontinue Standby operation by exiting the Manager's Menu and select the AUTO mode.

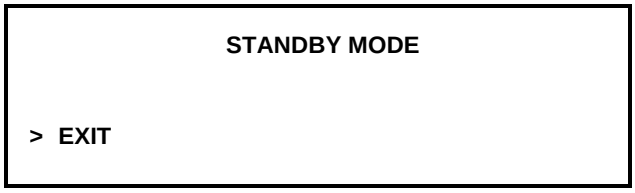


Figure 43

The BRUSH CLEAN CYCLE option allows the Manager to select the maximum number of days between brush cleaning the machine (C717 only). The brush clean cycle may only be changed after the freezer has been manually cleaned, but before it has been placed in the AUTO or STANDBY mode.

Note: This option can only be accessed through the Service Menu for the C709.

The following message will be displayed if the BRUSH CLEAN CYCLE option is selected when the machine is not in a brush clean state.

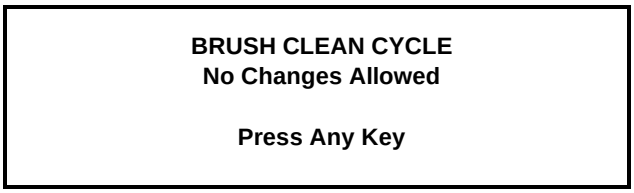


Figure 44

Change the number of days between brush clean intervals by using the arrow symbols. Touch the SEL symbol to save the setting and exit back to the Menu. The number of days displayed on the brush clean counter will change to the new setting.

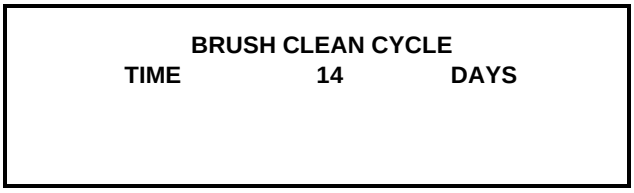


Figure 45

Always comply with local guidelines on the number of days allowed between brush clean cycles.

The MIX LEVEL AUDIBLE option when enabled will alert the operator with an audible tone when there is mix low or mix out condition. The following screen is displayed upon selecting this option.

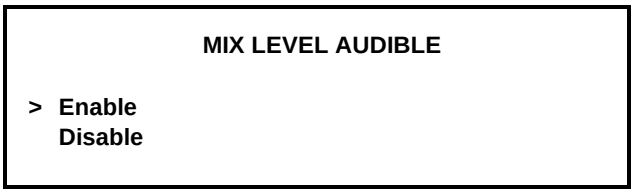


Figure 46

Disable the audible tone feature by selecting the UP arrow symbol to move the arrow to Disable. Select the SEL symbol to save the new setting and return to the Menu. The control panel icons for Mix Low and Mix Out will light as the mix level drops in the hopper but the audible tone will be disabled.

The FAULT DESCRIPTION display will indicate if there is a fault with the freezer. When no faults are detected the following screen will be displayed.

Figure 47

Touch the SEL symbol to display the next fault found or return to the Menu if no other faults exist. Touching the SEL symbol any time faults are displayed will clear the faults if corrected, upon returning to the Menu screen.

Listed below are the variable messages which will appear, along with an explanation for the corrective action.

NO FAULT FOUND - There was no fault found in the freezer. Nothing will appear on the screen after this variable message appears.

BEATER OVERLOAD - Place the power switch in the OFF position. Press the beater reset button firmly. Place the power switch in the ON position and restart in AUTO.

HPCO COMPRESSOR - Place the power switch in the OFF position. Wait 5 minutes for the machine to cool. Place the power switch in the ON position and restart in AUTO.

HOPPER THERMISTOR BAD - Place the power switch in the OFF position. Call service technician.

BARREL THERMISTOR BAD - Place the power switch in the OFF position. Call service technician.

The LOCKOUT HISTORY screen displays a history of the last 40 soft locks, hard locks, brush clean dates, or aborted heat cycles. Page numbers are indicated in the upper right hand corner. Page 1 always contains the most recent failure.

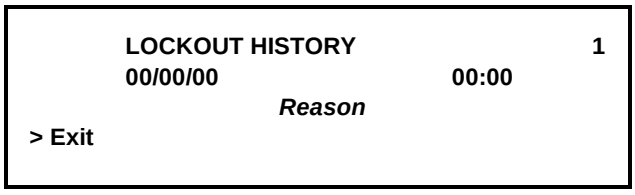


Figure 48

The second line of the screen displays the date and time a failure occurs. The third line indicates the reason for a failure, or will indicate if a successful brush cleaning has occurred. Some failures occur with multiple reasons. When this occurs, a page will be generated for each reason.

Use the arrow symbols to advance forward or backward to view each screen. Listed below are the variable messages that may appear.

Faults Occurring Entering a Heat Treatment Cycle:

POWER SWITCH OFF - The power switch is OFF.

AUTO OR STBY OFF - The control was not in the AUTO or STANDBY.

MIX OUT FAILURE - A mix out condition was present.

NO HEAT CYCLE TRIED - The Auto Heat Time was set to attempt a heat cycle more than 24 hours after the last successful heat cycle.

Faults Occurring While in Heat Mode:

HEAT MODE FAILURE - The maximum allowable heat mode time exceeded 90 minutes.

COOL MODE FAILURE - The maximum allowable cool mode time exceeded 90 minutes.

TOTAL TIME FAILURE - The maximum allowable total heat treatment time exceeded 4 hours.

BRUSH CLEAN TIMEOUT - The total days in operation exceeded the brush clean cycle setting.

POWER SWITCH OFF - The power switch was turned OFF during the heat cycle.

POWER FAIL IN H/C - A power failure occurred during the heat treatment cycle.

MIX LOW FAILURE - The mix level in the Hopper is too low for a successful heat cycle.

BEATER OVLD H/C - The overload tripped for the beater motor.

BRL THERM FAIL - The thermistor sensor for the freezing cylinder failed.

HOPPER THERM FAIL - The thermistor sensor for the hopper failed.

HPCO H/C - The side high pressure switch opened during the heat treatment cycle.

Faults Occurring While in AUTO Mode:

HPR>45F (7C) AFTER 1 HR - The mix temperature in the hopper was above 45°F (7°C) more than one hour.

BRL>45F (7C) AFTER 1 HR - The mix temperature in the freezing cylinder was above 45°F (7°C) more than one hour.

HPR>41F (5C) AFTER 4 HR - The mix temperature in the hopper was above 41°F (5°C) more than four hours.

BRL>41F (5C) AFTER 4 HR - The mix temperature in the freezing cylinder was above 41°F (5°C) more than four hours.

HPR>41F (5C) AFTER PF - The mix temperature in the hopper was above 41°F (5°C) more than four hours following a power failure.

BRL>41F (5C) AFTER PF - The mix temperature in the freezing cylinder was above 41°F (5°C) more than four hours following a power failure.

HPR>59F (15C) - The mix temperature in the hopper exceeded 59°F (15°C).

BRL>59F (15C) - The mix temperature in the freezing cylinder exceeded 59°F (15°C).

The HEAT CYCLE SUMMARY screen displays the hours since the last heat cycle, the hours since the product temperature was above 150°F (65.6°C), and the number of heat cycles completed since the last brush clean date.

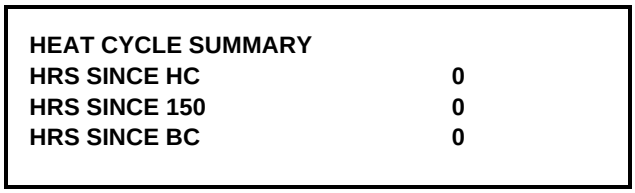


Figure 49

The HEAT CYCLE DATA screen contains a record of up to 366 heat treatment cycles. The most recent heat cycle data will be shown first. Each heat cycle record or page has two screens.

The first screen displays the month and day of the heat cycle, and the start time and end time the machine underwent the heat treatment cycle. The "B" on the right side indicates that both sides of the freezer are in operation. Line 3 displays the total time in each heat cycle phase. Line 4 displays the length of time of the last successful phase and the page number. Normally this time will be the COOL phase. However, it could be the HEAT or HOLD phase if a heat cycle failure occurred.

Select the UP arrow symbol to advance forward through the data pages. Select the DOWN arrow symbol to reverse the page direction.

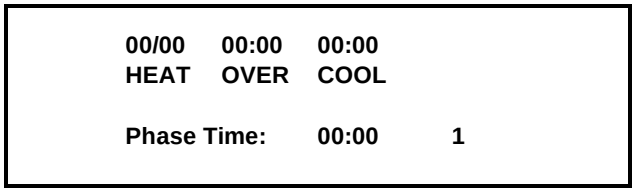


Figure 50

The second screen will have the same page number and displays the temperatures recorded in the hopper and freezing cylinder. The hopper and freezing cylinder temperatures are displayed on line 2. Line 3 displays the length of time the product was over 150°F (65.6°C). Line 4 displays the maximum temperature reached in the HEAT or HOLD phase.

Select the UP arrow symbol to advance to the next page or the DOWN arrow symbol to view the previous page.

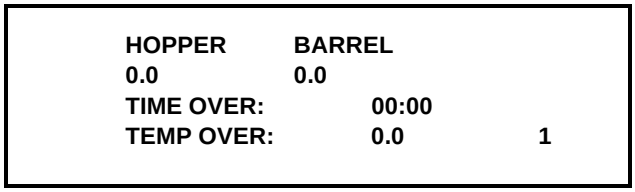


Figure 51

Heat Cycle Failure codes will display on the first screen on line 2 if a failure occurred.

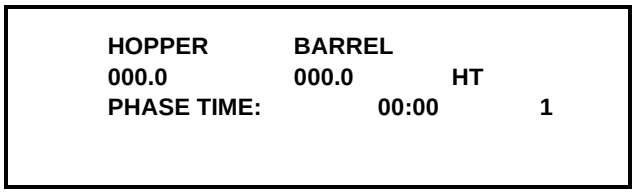


Figure 52

Listed below are variable failure code messages which could appear on line 2.

HT Heat Time Too Long
Mix temperature did not rise above 151°F (66.1°C) in less than 90 minutes.

CL Cool Time Too Long
Mix temperature in the hopper and freezing cylinder did not fall below 41°F (5°C) in less than 120 minutes.

TT Total Time Too Long
The heat treatment cycle must be completed in no more than 4 hours.

MO Mix Out Condition
A mix out condition was detected at the start or during the heat cycle.

ML Mix Low Condition
The Heat Phase or Cool Phase time was exceeded and a mix low condition was present.

BO Beater Overload Condition
A beater overload occurred during the heat cycle.

HO High Pressure Cut-Out Condition
A high pressure cut-out condition occurred during the heat cycle.

PF Power Failure
A power failure caused the Heat Phase, Cool Phase, or Total Cycle Time to exceed the maximum allowed time. If a power failure occurs, but the heat treatment cycle does not fail, an asterisk(*) will appear on the third line of the display.

PS Power Switch OFF
The power switch was placed into the OFF position during the heat cycle.

TH Thermistor Switch OFF
A thermistor probe has failed.

RC Record Cleared
Data has not been written to the page or cleared due to corrupt data.

OP Operator Abort
Indicates the heat cycle was aborted in the OPERATOR ABORT option in the Service Menu.

PD Product Door Not in Place
A product door is not in place or is loose.

The SYSTEM INFORMATION is displayed on three separate screens. The first screen contains the control and software version installed in the machine.

SOFTWARE VERSION
C709 CONTROL UVC3
VERSION 1.07
> Next

Figure 53

Touch the SEL symbol to advance to the next system information screen containing the software language version.

Language
V1.11 r 00 English 515

> Next

Figure 54

Touch the SEL symbol to advance to the third system information screen containing the model bill of material and machine serial number. Touching the SEL symbol again will return to the Menu list.

B.O.M. C70927C000
S/N K0000000

> Next

Figure 55

The CURRENT CONDITIONS screen provides the viscosity readings for the product when the machine is running, and the hopper and the freezing cylinder temperatures for the machine.

VISC 0.0
HOPPER 41.0
CYLINDER 41.0

Figure 56

CURRENT CONDITIONS is the only Menu screen that will return the control panel keys to normal operation. The Menu keys will not be lit when this option is selected so all panel touch keys are fully functional. Exit the CURRENT CONDITIONS screen and return to the Menu by touching the SEL symbol.

Section 6 Operating Procedures

The C709 machine stores mix in a hopper. It has a 3.4 quart (3.2 liter) capacity freezing cylinder with a single spout door.

The C717 machine stores mix in two hoppers. It has two 3.4 quart (3.2 liter) capacity freezing cylinders with a three spout door.

We begin our instructions at the point where we enter the store in the morning and find the parts disassembled and laid out to air dry from the previous night's cleaning.

These opening procedures will show you how to assemble these parts into the freezer, sanitize them, and prime the freezer with fresh mix in preparation to serve your first portion.

If you are disassembling the machine for the first time or need information to get to this starting point in our instructions, turn to page 42, “Disassembly”, and start there.

Assembly

Note: When lubricating parts, use an approved food grade lubricant (example: Taylor Lube).

MAKE SURE POWER SWITCH IS IN THE “OFF” POSITION! Failure to follow this instruction may result in severe personal injury from hazardous moving parts.

Step 1
Before installing the beater drive shaft, lubricate the groove on the beater drive shaft. Slide the beater drive shaft boot seal over the small end of the beater drive shaft and engage into the groove on the shaft. Heavily lubricate the inside portion of the boot seal and also lubricate the flat end of the boot seal that comes in contact with the rear shell bearing. Apply an even coat of lubricant to the shaft. DO NOT lubricate the hex end.

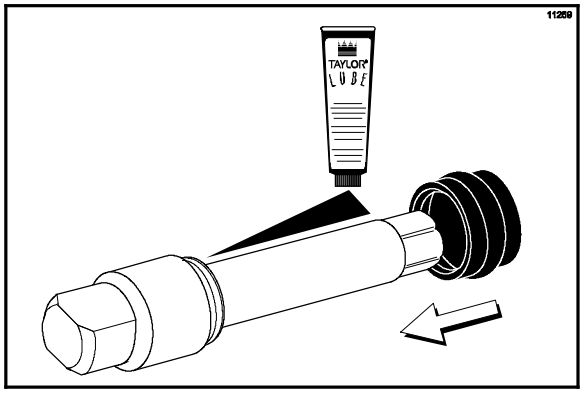


Figure 57

Note: To ensure the mix does not leak out of the back of the freezing cylinder, the middle section of the boot seal should be convex or extend out from the seal. If the middle section of the boot seal is concave or extending into the middle of the seal, turn the seal inside out.

Step 2
Insert the beater drive shaft through the rear shell bearing in the freezing cylinder and engage the hex end firmly into the drive coupling.

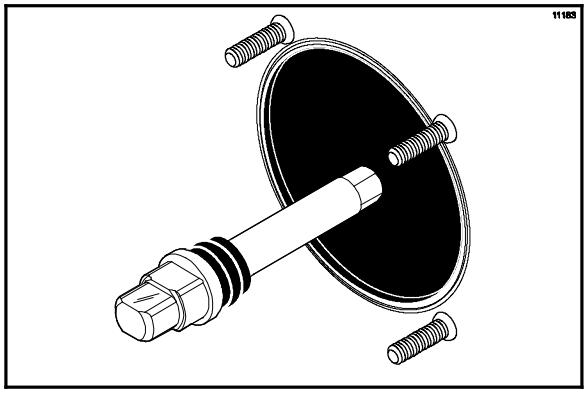


Figure 58

Step 3
Take one of the scraper blades and slip it under the hook at the front of the beater. Wrap the blade around the beater following the helix and pushing the blade down onto the helix as you wrap. At the back end of the beater, slip the blade under the hook. **Repeat this step** for the second scraper blade.

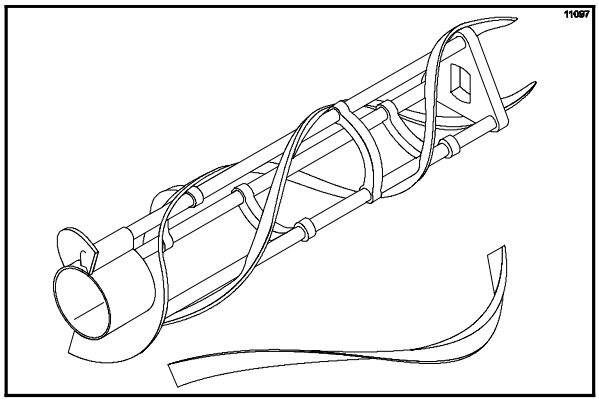


Figure 59

USE EXTREME CAUTION when handling the beater assembly. The scraper blades are very sharp and may cause injury.

Step 4
Holding the beater securely, slide the beater one third of the way into the freezing cylinder. Looking into the freezing cylinder, align the hole at the rear of the beater with the flats on the end of the drive shaft.

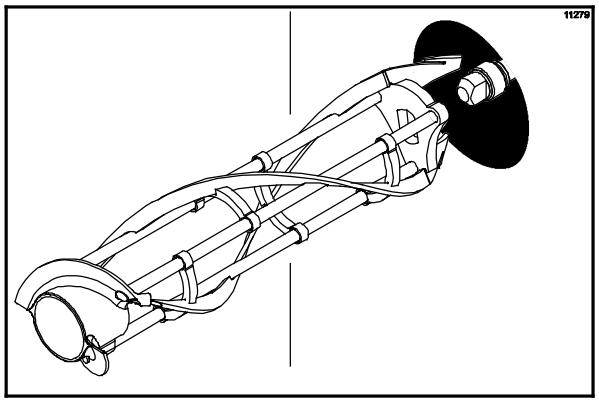


Figure 60

Step 5
Slide the beater the remainder of the way into the freezing cylinder and over the end of the drive shaft. The beater should fit snugly, but not so tightly that the beater cannot be turned slightly to engage the drive shaft. If the beater slides in too easily with little or no resistance, there will not be enough force against the beater to hold the blades in place.

Repeat these steps for the other side of the C717.

Freezer Door Assembly

The assembly of the C709 freezer door is different from the C717 freezer door. Please follow the appropriate instructions for your machine.

Model C709 Freezer Door Assembly

Step 1
Place the door gasket into the groove on the back of the freezer door. Slide the front bearing over the baffle rod so the flanged edge is against the door. **DO NOT lubricate the gasket or bearing.** (See Figure 61.)

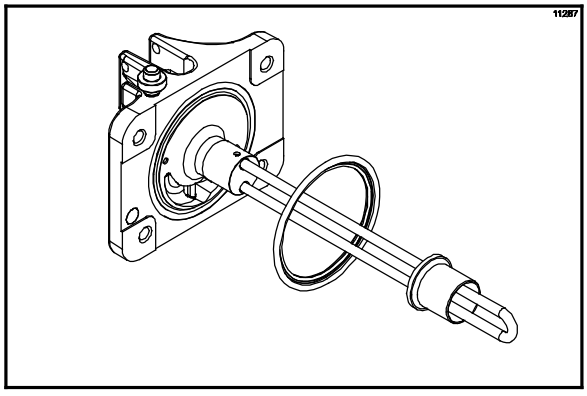


Figure 61

Model C709 Freezer Door Assembly *(Cont'd.)*

Step 2
Slide the three o-rings into the grooves on the draw valve and lubricate. (See Figure 62.)

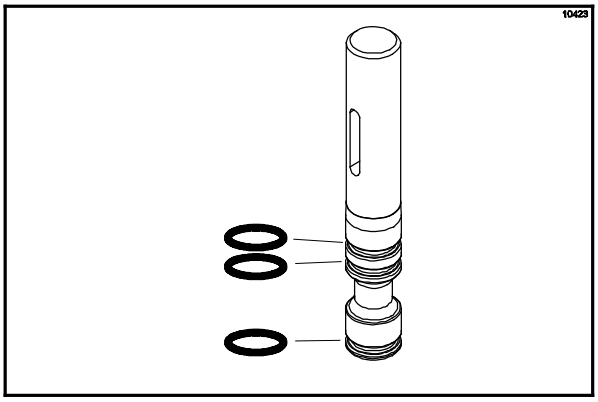


Figure 62

Step 3
Lightly lubricate the inside of the top of the freezer door valve cavity. (See Figure 63.)

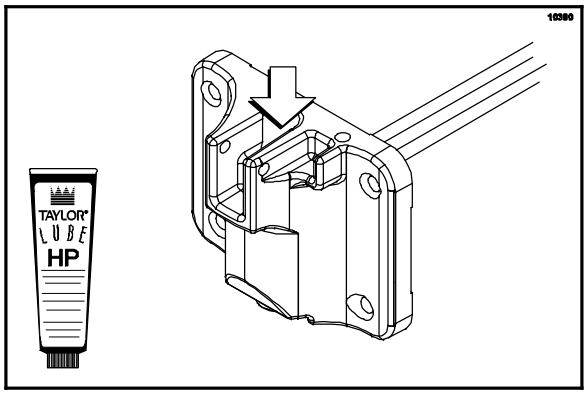


Figure 63

Step 4
Insert the draw valve from the top, with the draw handle slot facing forward. (See Figure 64.)

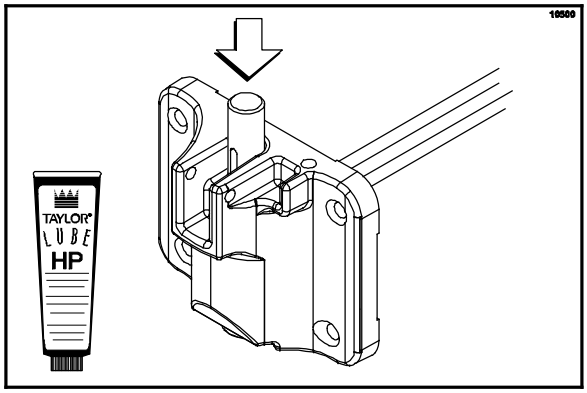


Figure 64

Step 5
Insert the baffle rod through the beater in the freezing cylinder. With the door seated on the freezer studs, install the handscrews, with the longer ones on top. Tighten equally in a criss-cross pattern to insure the door is snug. (See Figure 65.)

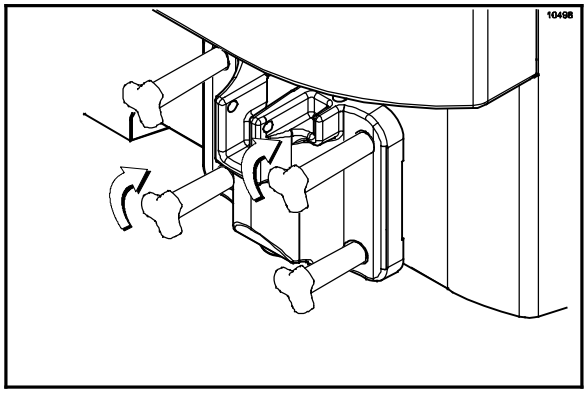


Figure 65

Step 6
Position the draw handle with the adjustment screw facing down. Slide the fork of the draw handle into the slot of the draw valve. Secure with pivot pin. (See Figure 66.)

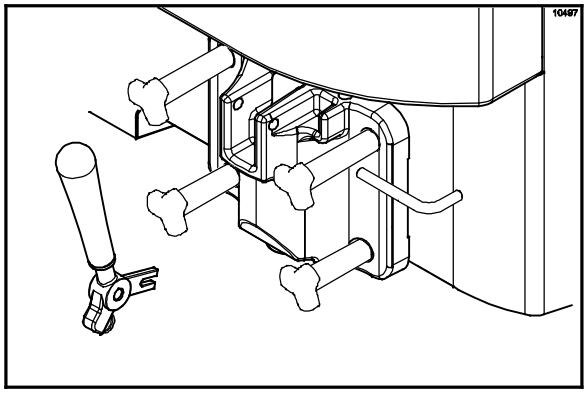


Figure 66

Model C709 Freezer Door Assembly *(Cont'd.)*

Note: The C709 features an adjustable draw handle to provide portion control, giving a better consistent quality to your product and controlling costs.

The draw handle should be adjusted to provide a flow rate of 5 to 7-1/2 oz. (142 g. to 213 g.) of product by weight per 10 seconds. To INCREASE the flow rate, turn the adjustment screw CLOCKWISE. Turn the adjustment screw COUNTER-CLOCKWISE to DECREASE the flow rate.

Step 7
Slide the two drip pans into the holes in the left and rear panels. (See Figure 67.)

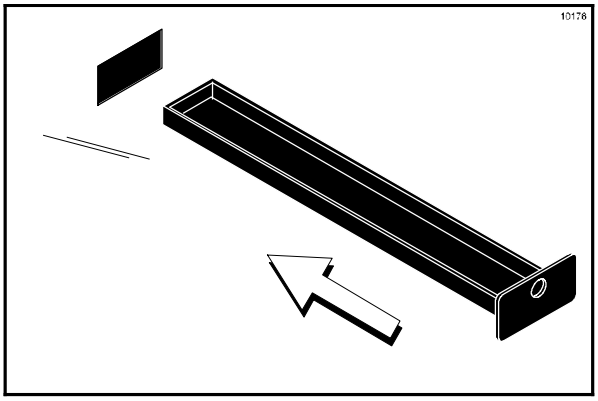


Figure 67

Step 8
Install the front drip tray and splash shield under the door spout. (See Figure 68.)

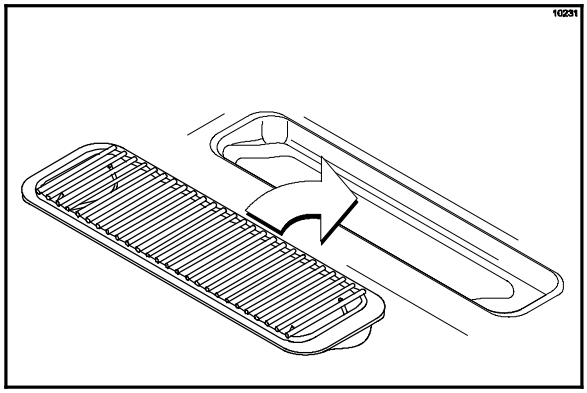


Figure 68

Model C717 Freezer Door Assembly

Step 1
Place the door gaskets into the grooves on the back of the freezer door.

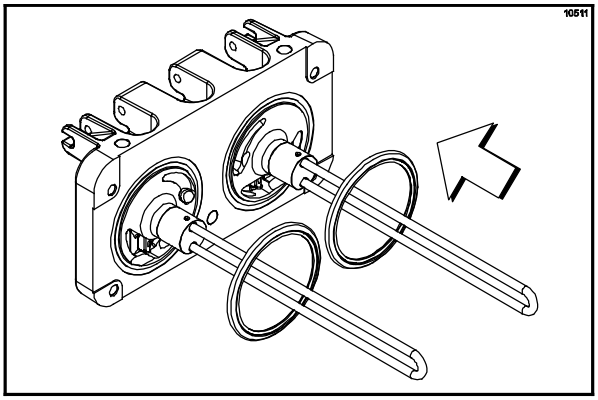


Figure 69

Step 2
Slide the front bearings over the baffle rods. The flanged edges should be against the door. **DO NOT lubricate the gaskets or bearings.**

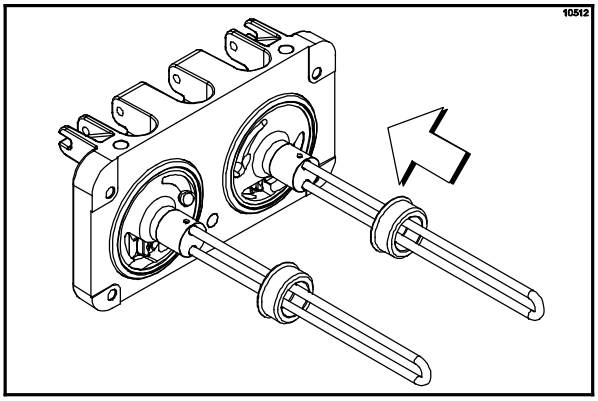


Figure 70

Step 3
Insert the baffle rods through the beaters in the freezing cylinders. With the door seated on the freezer studs, install the handscrews, with the longer ones on top. Tighten equally in a criss-cross pattern to insure the door is snug.

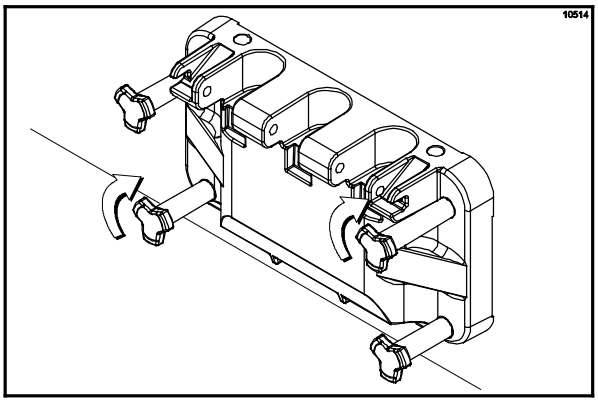


Figure 71

Step 4
Slide the three o-rings into the grooves of each standard draw valve. Slide the H-ring and o-ring into the grooves of the center draw valve. Lubricate the H-ring and o-rings.

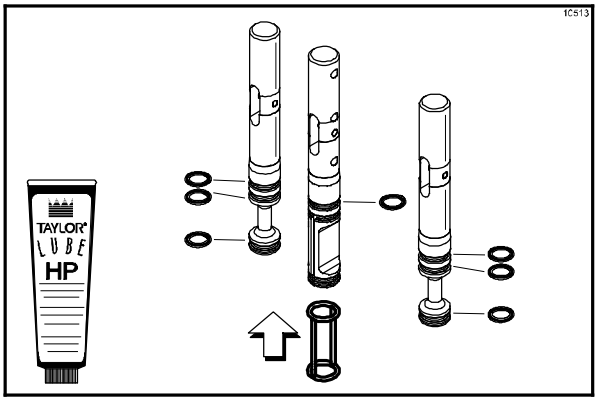


Figure 72

Step 5
Lubricate the inside of the freezer door spouts, top and bottom.

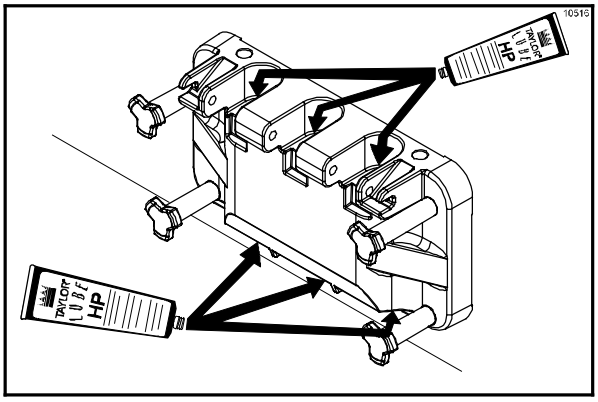


Figure 73

Step 6
Insert the draw valves from the bottom until the slot in each draw valve comes into view.

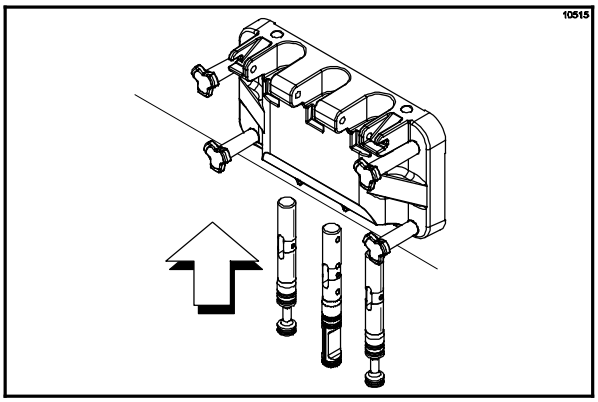


Figure 74

Step 7
Position each draw handle with the adjustment screw facing down. Slide the fork of each draw handle into the slot of each draw valve, starting from the right.

Model C717 Freezer Door Assembly *(Cont'd.)*

Step 8
Slide the pivot pin through the draw handles as the handles are inserted into the draw valves.

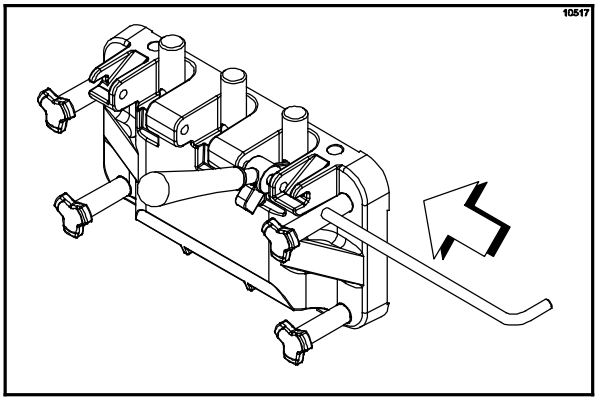


Figure 75

Note: This freezer features adjustable draw handles to provide portion control, giving a better consistent quality to your product and controlling costs. The draw handles should be adjusted to provide a flow rate of 5 to 7-1/2 oz. (142 g. to 213 g.) of product by weight per 10 seconds.

To INCREASE the flow rate, turn the adjustment screw CLOCKWISE. To DECREASE the flow rate, turn the adjustment screw COUNTER-CLOCKWISE.

Step 9
Snap the design caps over the bottom of the door spouts.

Step 10
Slide the two rear drip trays into the holes in the back panel. Slide the two drip pans into the holes in the side panels. (See Figure 76.)

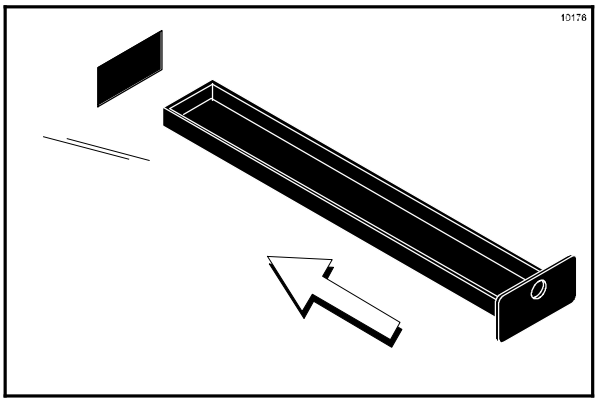


Figure 76

Step 11
Install the front drip tray and splash shield under the door spouts. (See Figure 77.)

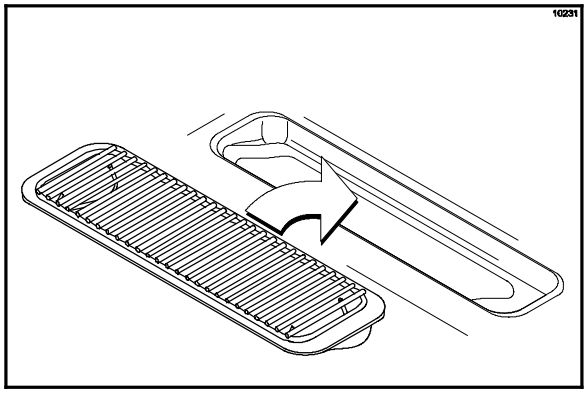


Figure 77

Feed Tube Assembly

Step 1
Slide the three o-rings into the grooves of the inner feed tube.

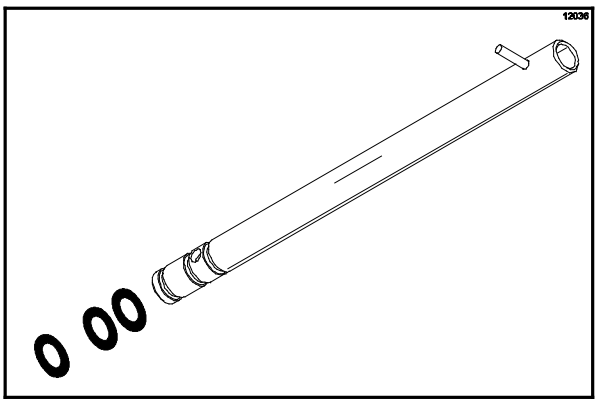


Figure 78

Step 2
Slide the two o-rings into the grooves of the outer feed tube.

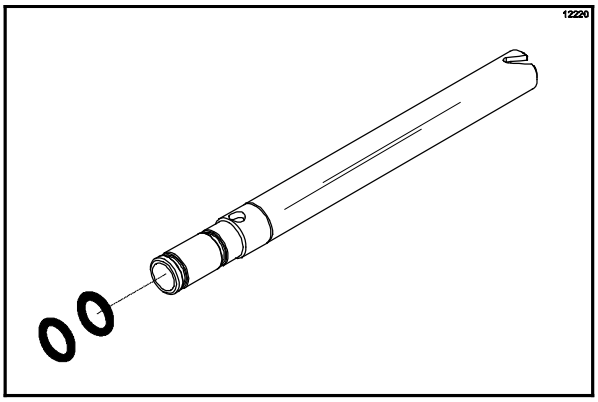


Figure 79

Step 3
Slide the small o-ring into the groove of the air orifice.

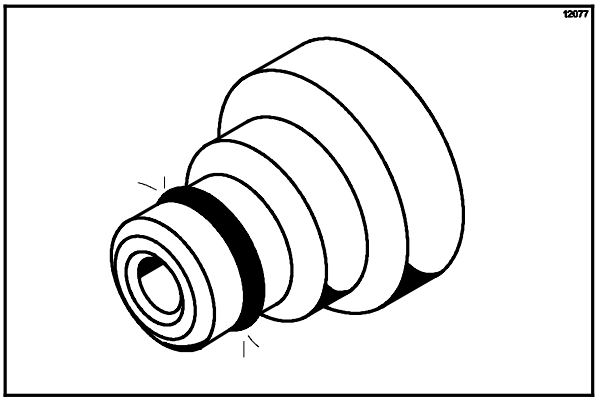


Figure 80

Note: Make sure the hole in the air orifice is clean and is not clogged. If the hole in the air orifice should become clogged, use soap and hot water to clear the hole. **Do not enlarge the hole in the air orifice.**

Step 4
Lay the inner feed tube, the outer feed tube, and the agitator in the bottom of the mix hopper for sanitizing.

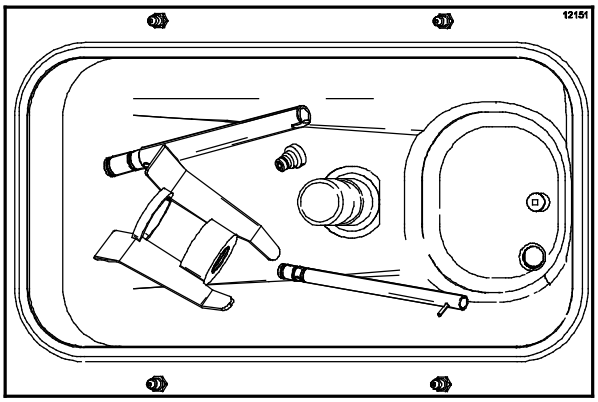


Figure 81

Repeat Steps 1 through 4 for the other side of the C717.

Sanitizing

Step 1
Prepare an approved 100 PPM sanitizing solution (examples: 2-1/2 gal. [9.5 liters] of Kay-5® or 2 gal. [7.6 liters] of Stera-Sheen®). USE WARM WATER AND FOLLOW THE MANUFACTURER'S SPECIFICATIONS.

Step 2
Pour the sanitizing solution over all the parts in the bottom of the mix hopper and allow it to flow into the freezing cylinder.

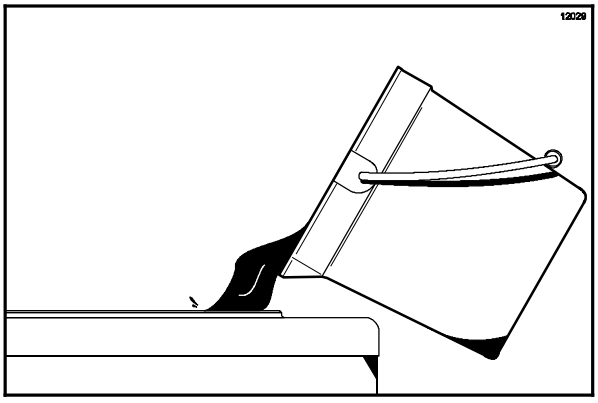


Figure 82

Note: You have just sanitized the mix hopper and parts; therefore, be sure your hands are clean and sanitized before going on in these instructions.

Step 3
While the solution is flowing into the freezing cylinder, take particular care to brush-clean the mix level sensing probe on the bottom of the hopper, the mix hopper, the mix inlet hole, and the feed tubes.

Step 4
Place the power switch in the ON position.

Step 5
Touch the WASH symbol and allow the sanitizing solution in the freezing cylinder to agitate for five minutes.

Step 6
With a pail beneath the door spout(s), open close the draw valve six times. Then open the draw valve and draw off the sanitizing solution.

Step 7
Touch the WASH symbol and close the draw valve.

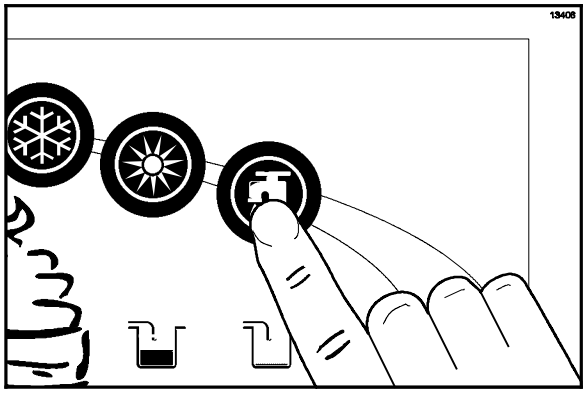


Figure 83

Note: Be sure your hands are clean and sanitized before going on in these instructions.

Step 8
Lubricate the o-rings on the inner and outer feed tubes. **DO NOT** lubricate the o-ring on the air orifice. Place the inner feed tube inside the outer feed tube.

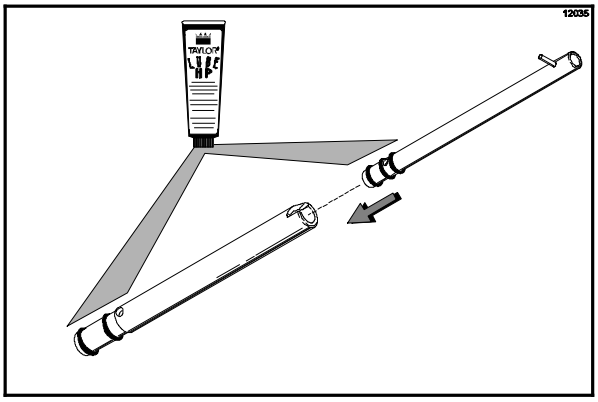


Figure 84

Step 9
Install the air orifice into the hole in the top of the inner feed tube.

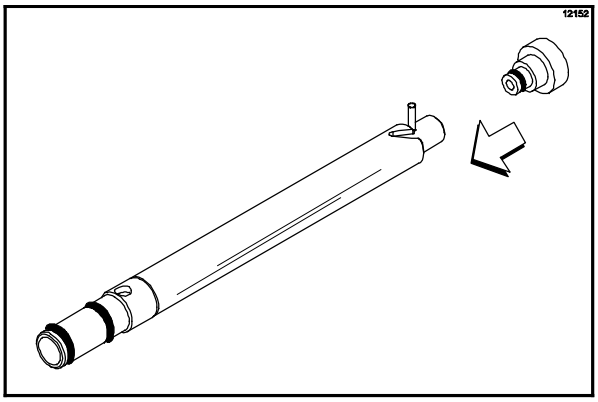


Figure 85

Note: Make sure the hole in the air orifice is clean and is not clogged. If the hole in the air orifice should become clogged, use soap and hot water to clear the hole. **Do not enlarge the hole in the air orifice.**

Step 10
Stand the assembled feed tube in the corner of the mix hopper and place the agitator on the agitator housing.

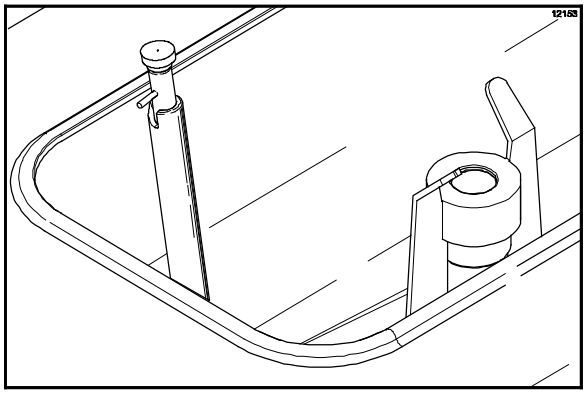


Figure 86

Step 11
Return to the freezer with a small amount of sanitizing solution. Dip the door spout brush into the sanitizing solution and brush clean the door spout and bottom of the draw valve.

Note: To assure sanitary conditions are maintained, brush clean each item for a total of 60 seconds, repeatedly dipping the brush in sanitizing solution.

Repeat these steps for the other side of the C717.

Priming

Note: Use only FRESH MIX when priming the freezer.

Step 1
With a mix pail beneath the door spout(s), open the draw valve. Pour 2-1/2 gallons (9.5 liters) of FRESH mix into the mix hopper and allow it to flow into the freezing cylinder. This will force out any remaining sanitizing solution. When full strength mix is flowing from the door spout, close the draw valve.

Step 2
When mix stops bubbling down into the freezing cylinder, install the assembled feed tubes in the mix inlet hole.

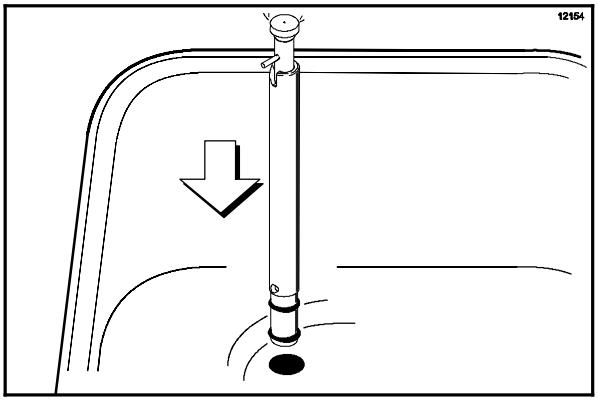


Figure 87

The pin on the inner feed tube should be turned and positioned at the bottom of the notch in the outer feed tube. This will align the holes in the feed tubes and allow mix and air to enter the freezing cylinder.

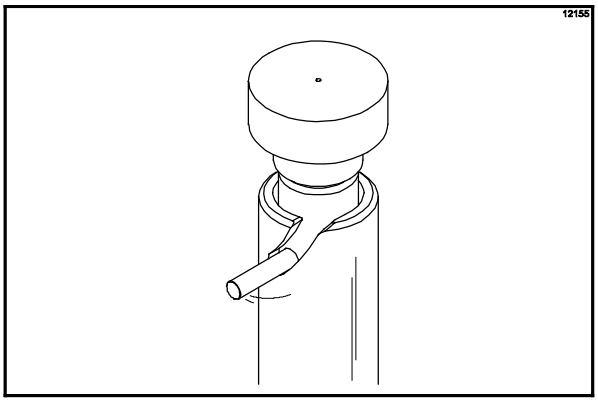


Figure 88

Step 3
Select the AUTO symbol ❄.

Step 4
Fill the hopper with fresh mix and place the mix hopper cover in position.

Repeat these steps for the other side of the C717.

Daily Closing Procedures

This procedure must be performed once daily!

The function of the Heat Treatment Cycle is to destroy bacteria by raising the temperature of the mix in the freezing cylinder and the hopper to a specified temperature for a specified period of time, and then bringing the temperature back down low enough to retard spoilage.

The Heat Treatment Cycle will start at the time designated in the Auto Heat Time.

IMPORTANT: The level of mix in the mix hopper(s) must be up to the fill line on the agitator paddle(s). (The mix low light must not be on.) **Note:** If the BRUSH CLEAN COUNTER display has counted down to one day, do not add mix. The machine must be disassembled and brush cleaned within 24 hours.

The freezer must be in the AUTO (AUTO symbol ❄ illuminated) or in the STANDBY mode (STANDBY symbol illuminated) before the HEAT cycle may be started.

Step 1
Remove the hopper cover(s), drip pan(s), front drip tray, and the splash shield. Take them to the sink for cleaning and sanitizing.

MAKE SURE YOUR HANDS ARE CLEAN AND SANITIZED BEFORE PERFORMING THESE NEXT STEPS.

Step 2
Remove the air orifice(s), the feed tube assembly(lies), and the agitator(s) from the mix hopper(s). Take these parts to the sink for cleaning and sanitizing.

Step 3
Rinse these parts in cool, clean water.

Step 4
Prepare a small amount of an approved 100 PPM cleaning/sanitizing solution (examples: Kay-5® or Stera-Sheen®). USE WARM WATER AND FOLLOW THE MANUFACTURER'S SPECIFICATIONS. Brush clean the parts.

Step 5
Place the front drip tray, splash shield, and air orifice(s) on a clean, dry surface to air-dry overnight or until the heating cycle is complete.

Step 6
Prepare a small amount of an approved 100 PPM cleaning/sanitizing solution (examples: Kay-5® or Stera-Sheen®). USE WARM WATER AND FOLLOW THE MANUFACTURER'S SPECIFICATIONS. Sanitize the drip pans, feed tube assembly(ies), agitator(s) and hopper cover(s).

Step 7
Install the agitator(s) back onto the agitator drive shaft housing(s).

IMPORTANT: If you do not install the agitator(s) correctly, the machine will fail the heat cycle and lock out in the morning.

Step 8
Install the feed tube assembly(ies). Lift and turn the inner feed tube of each assembled feed tube so the pin rests on top of the outer feed tube. This will close the hole in the assembled feed tubes, preventing mix in the hopper(s) from entering the freezing cylinder(s) during the Heating and Standby process.

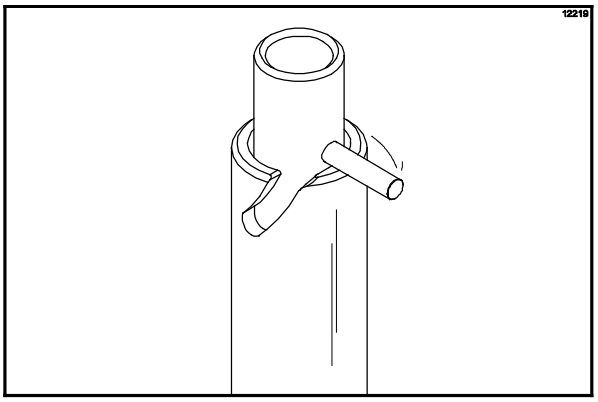


Figure 89

Step 9
Replace the hopper cover(s) and install the drip pans.

Step 10
Return to the freezer with a small amount of cleaning solution. Dip the door spout brush into the cleaning solution and brush clean the door spout(s) and bottom of the draw valve(s).

Note: To assure sanitary conditions are maintained, brush each item for a total of 60 seconds, repeatedly dipping the brush in cleaning solution.

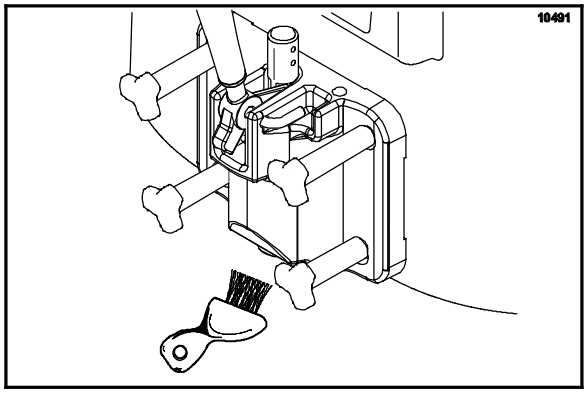


Figure 90

Step 11
Using a clean, sanitized towel, wipe down the freezer door, front panel, the area around the bottom of the freezer door, and any other areas that demonstrate a build-up of either moisture or food substance.

The heat cycle will start when the clock on the machine reaches the AUTO HEAT TIME set in the Manager's Menu (see page 24).

There are 3 phases of the heat cycle: Heating, Holding and Cooling. Each phase has a time limit. If any one of the three phases fail to reach the proper temperatures within the time limit, the cycle will automatically abort and return to the STANDBY mode.

A failure message will appear on the fluorescent display to inform the operator that the machine did not successfully complete the heat treatment cycle. The product may not be safe to serve. The freezer will be locked out (softlock) of the AUTO mode. The operator will be given the option of selecting the HEAT symbol which will begin a new heat cycle, or touching the WASH symbol which will place the freezer into the OFF mode to allow a brush clean of the machine.

Note: Once the heating cycle has started, it cannot be interrupted. The heating cycle will take a maximum of 4 hours to complete with full hoppers.

DO NOT attempt to draw product or disassemble the machine during the HEAT cycle. The product is hot and under extreme pressure.

When the heating cycle is complete, the control will return to the STANDBY mode. The STANDBY symbol(s) will be illuminated.

Daily Opening Procedures

Before performing the opening procedures, check the display panel for any error messages. Normally the display is blank unless an operational fault has occurred. If a fault has been detected, investigate the cause and follow the instructions on the display before proceeding with the opening procedures. (See Failure Messages, starting on page 26.)

Set-Up - Complete The Following

Make sure your hands are clean and sanitized before performing these next steps.

Step 1
Prepare a small amount of an approved 100 PPM sanitizing solution (examples: Kay-5® or Stera-Sheen®). USE WARM WATER AND FOLLOW THE MANUFACTURER'S SPECIFICATIONS.

Step 2
Sanitize the air orifice(s), front drip tray and splash shield in this solution.

Step 3
Return to the freezer with a small amount of sanitizing solution. Dip the door spout brush into the sanitizing solution and brush clean the door spout(s) and bottom of the draw valve(s).

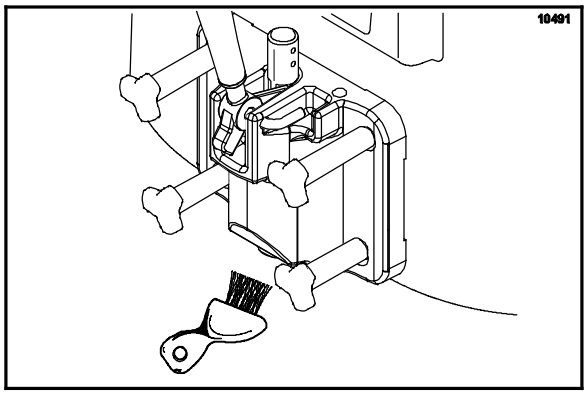


Figure 91

Note: To assure sanitary conditions are maintained, brush clean each item for a total of 60 seconds, repeatedly dipping the brush in sanitizing solution.

Step 4
Using a clean, sanitized towel, wipe down the freezer door, front panel, the area around the bottom of the freezer door, and any other areas that demonstrate a build-up of either moisture or food substance. Install the front drip tray and the splash shield.

Step 5
When ready to resume normal operation, touch the AUTO symbol ❄. When the unit cycles off, the product in the freezing cylinder will be at serving viscosity.

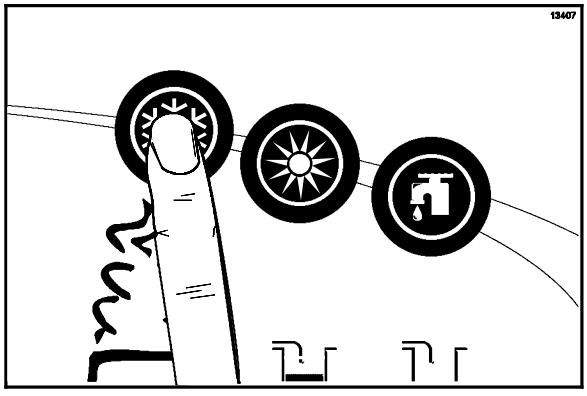


Figure 92

Step 6
Lift the hopper cover(s). Turn the inner feed tube of each assembled feed tube so the pin rests at the bottom of the notch of the outer feed tube. Install the air orifice(s).

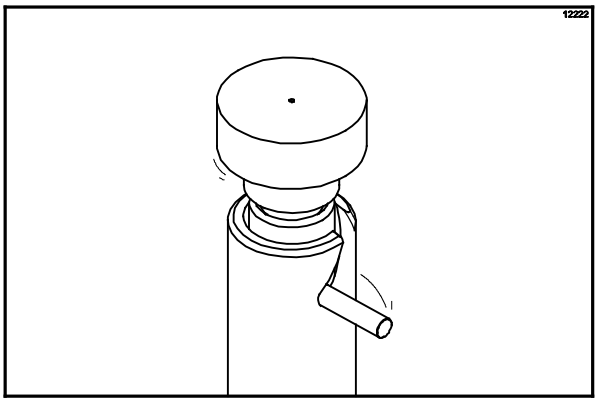


Figure 93

The control has a feature in the Manager's Menu to enable or disable the AUTO START feature. When AUTO START in enabled, the machine will automatically exit the STANDBY mode and start the machine in the AUTO mode at a designated time each day. (See page 24.)

Note: This procedure should be performed 15 minutes prior to serving product.

Manual Brush Cleaning

This Procedure Must Be Completed Every Two Weeks!

ALWAYS FOLLOW LOCAL HEALTH CODES.

To disassemble the machines, the following items will be needed:

- Two cleaning and sanitizing pails
- Sanitizer/Cleaner
- Necessary brushes (provided with freezer)
- Single service towels

Draining Product From The Freezing Cylinder

Step 1

Press the AUTO symbol ❄, cancelling compressor and beater motor operation.

Step 2

Remove the hopper cover, the agitator paddle, and the assembled feed tube. Take these parts to the sink for cleaning.

Step 3

With a pail beneath the door spout(s), touch the WASH symbol and open the draw valve.

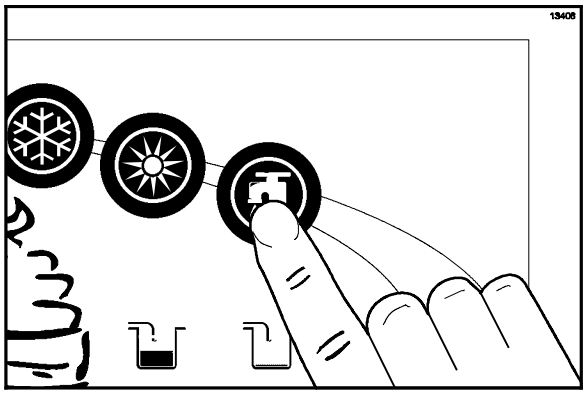


Figure 94

Drain the product from the freezing cylinder and the mix hopper and properly dispose of the mix.

Step 4

When the flow of product stops, touch the WASH symbol , cancelling the WASH mode. Close the draw valve.

Repeat these steps for the other side of the C717.

Rinsing

Step 1

Pour two gallons (7.6 liters) of cool, clean water into the mix hopper. With the white hopper brush, scrub the mix hopper, mix level sensing probes and the outside of the agitator drive shaft housing. Using the double ended brush, brush clean the mix inlet hole.

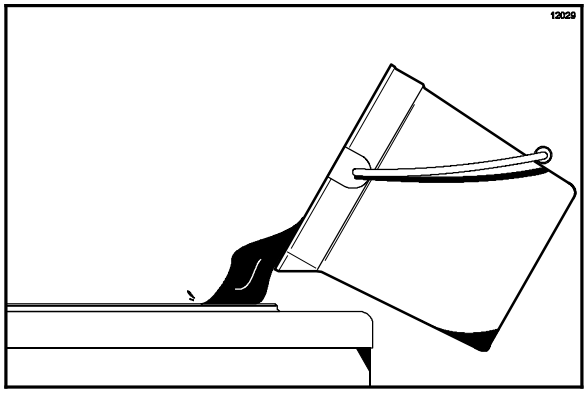


Figure 95

Note: Do not brush clean the mix inlet hole while the machine is in the WASH mode.

Step 2

With a mix pail beneath the door spout(s), touch the WASH symbol .

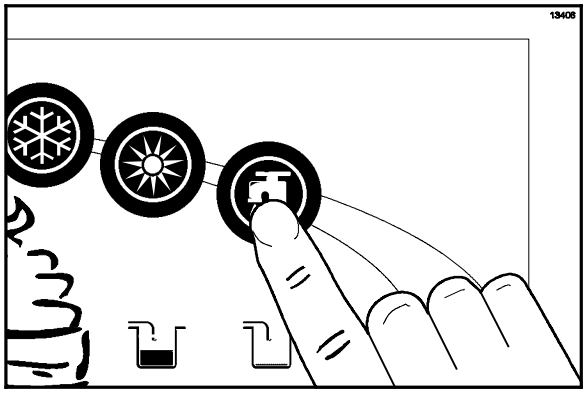


Figure 96

Step 3
Open the draw valve on the freezer door. Drain all the rinse water from the door spout, close the draw valve and touch the WASH symbol, cancelling the wash mode.

Step 4
Repeat this procedure using clean, warm water, until the water being discharged is clear.

Repeat these steps for the other side of the C717.

Hopper Cleaning

Step 1
Prepare an approved 100 PPM cleaning solution (examples: 2-1/2 gal. [9.5 liters] of Kay-5® or 2 gal. [7.6 liters] of Stera-Sheen®). USE WARM WATER AND FOLLOW THE MANUFACTURER'S SPECIFICATIONS.

Step 2
Pour the solution into the hopper and allow it to flow into the freezing cylinder.

Step 3
Using the white hopper brush, clean the mix hopper, mix level sensing probes and the outside of the agitator drive shaft housing. Using the double ended brush, clean the mix inlet hole. (**Note:** Do not brush clean the mix inlet hole while the machine is in the WASH mode.)

Step 4

Touch the WASH symbol. This will cause the cleaning solution in the freezing cylinder to come in contact with all areas of the freezing cylinder.

Step 5
Place an empty pail beneath the door spout(s).

Step 6
Open the draw valve on the freezer door and draw off all the solution.

Step 7
Once the cleaning solution stops flowing from the door spout, close the draw valve and touch the WASH symbol, cancelling the Wash mode.

Repeat these steps for the other side of the C717.

Disassembly

Note: Failure to remove the parts specified below for brush cleaning and lubrication will result in damage to the machine. These parts must be removed every 14 days or the machine will lock out and will not operate.

Step 1
Be sure the power switch is in the OFF position.

Step 2
Remove the handscrews, freezer door, beater and scraper blades, and drive shaft with drive shaft seal from the freezing cylinder.

Step 3
Remove the scraper blades.

Step 4
Remove the drive shaft seal from the drive shaft.

Step 5
Remove the freezer door gasket, front bearing, pivot pin, draw handle, and draw valve. Remove the three o-rings from the draw valve.

Step 6
Remove the front drip tray and splash shield.

Step 7
Remove all drip pans and take them to the sink for cleaning.

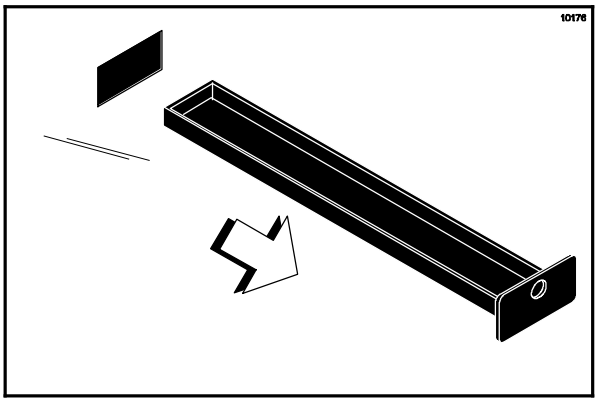


Figure 97

Note: If the drip pans are filled with an excessive amount of mix, it is an indication that the drive shaft seal(s), or o-ring(s) should be replaced or properly lubricated.

Repeat these steps for the other side of the C717.

Brush Cleaning

Step 1
Prepare an approved 100 PPM cleaning solution (examples: 2-1/2 gal. [9.5 liters] of Kay-5® or 2 gal. [7.6 liters] of Stera-Sheen®). USE WARM WATER AND FOLLOW THE MANUFACTURER'S SPECIFICATIONS. Make sure all brushes provided with the freezer are available for brush cleaning.

Step 2
Remove all o-rings.

Step 3
Thoroughly brush clean all disassembled parts in the cleaning solution, making sure all lubricant and mix film is removed. Be sure to brush all surfaces and holes, especially the draw valve hole in the freezer door.

Step 4
Rinse all parts with clean, warm water. Place the parts on a clean, dry surface to air dry overnight.

Step 5
Return to the freezer with a small amount of cleaning solution. Using the black brush, clean the rear shell bearing at the back of the freezing cylinder.

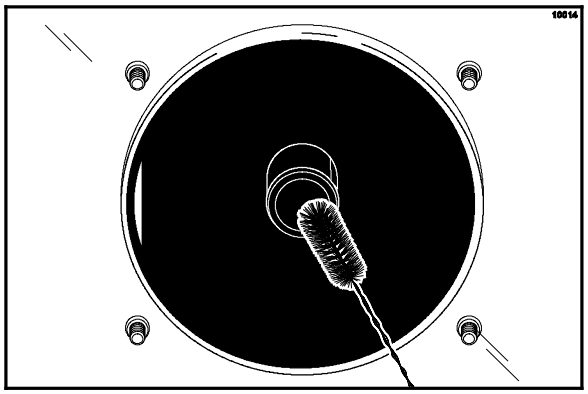


Figure 98

Repeat these steps for the other side of the C717.

Step 6
Wipe all exterior surfaces of the freezer with a clean, sanitized towel.

Section 7 Important: Operator Checklist

During Brush Cleaning and Sanitizing

ALWAYS FOLLOW LOCAL HEALTH CODES.

Cleaning and sanitizing schedules are governed by your State or local regulatory agencies and must be followed accordingly. The following check points should be stressed during the cleaning and sanitizing operations.

CLEANING AND SANITIZING MUST BE PERFORMED EVERY TWO WEEKS.

Troubleshooting Bacterial Count

☐ 1. Thoroughly clean and sanitize the machine regularly, including complete disassembly and brush cleaning.

☐ 2. Use all brushes supplied for thorough cleaning. The brushes are specially designed to reach all mix passageways.

☐ 3. Use the white bristle brush to clean the mix inlet hole which extends from the mix hopper down to the rear of the freezing cylinder.

☐ 4. Use the black bristle brush to thoroughly clean the rear shell bearing located at the rear of the freezing cylinder. Be sure there is a generous amount of cleaning solution on the brush.

☐ 5. Properly prepare the cleaning and sanitizing solutions. Read and follow the label directions carefully. Too strong of a solution may damage the parts and too weak of a solution will not do an adequate job of cleaning or sanitizing.

☐ 6. The temperature of the mix in the mix hopper and walk-in cooler should be below 40°F (4.4°C).

Regular Maintenance Checks

☐ 1. Replace scraper blades that are nicked or damaged. Before installing the beater assembly, be certain that scraper blades are properly attached to the helix.

☐ 2. Check the rear shell bearing for signs of wear (excessive mix leakage in rear drip pan) and be certain it is properly cleaned.

☐ 3. Using a screwdriver and cloth towel, keep the rear shell bearing and the female hex drive socket clean and free of lubricant and mix deposits.

☐ 4. Dispose of o-rings and seals if they are worn, torn, or fit too loosely, and replace with new ones.

☐ 5. Follow all lubricating procedures as outlined in “Assembly”.

☐ 6. If your machine is air cooled, check the condensers for an accumulation of dirt and lint. Dirty condensers will reduce the efficiency and capacity of the machine. Condensers should be cleaned **monthly** with a soft brush. **Never** use screwdrivers or other metal probes to clean between the fins.
Note: For machines equipped with an air filter, it will be necessary to vacuum clean the filters on a monthly schedule.

WARNING! Always disconnect electrical power prior to cleaning the condenser. Failure to follow this instruction may result in electrocution.

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☐ 7. If your machine is equipped with an auxiliary refrigeration system, check the auxiliary condenser for accumulation of dirt and lint. Dirty condensers will reduce the refrigeration capacity of the mix hopper. Condensers must be cleaned **monthly** with a soft brush. **Never** use screwdrivers or other metal probes to clean between the fins.

WARNING! Always disconnect electrical power prior to cleaning the condenser. Failure to follow this instruction may result in electrocution.

☐ 8. If your machine is water cooled, check the water lines for kinks or leaks. Kinks can occur when the machine is moved back and forth for cleaning or maintenance purposes. Deteriorated or cracked water lines should be replaced only by an authorized Taylor distributor.

Winter Storage

If the place of business is to be closed during the winter months, it is important to protect the freezer by following certain precautions, particularly if the building is subject to freezing conditions.

Disconnect the freezer from the main power source to prevent possible electrical damage.

On water cooled freezers, disconnect the water supply. Relieve pressure on the spring in the water valve. Use air pressure on the outlet side to blow out any water remaining in the condenser. **This is extremely important.** Failure to follow this procedure may cause severe and costly damage to the refrigeration system.

Your local Taylor Distributor can perform this winter storage service for you.

Wrap detachable parts of the freezer such as beater, blades, drive shaft, and freezer door, and place them in a protected dry place. Rubber trim parts and gaskets can be protected by wrapping them with moisture-proof paper. All parts should be thoroughly cleaned of dried mix or lubrication which attract mice and other vermin.

It is recommended that an authorized service technician perform winter storage draining, to insure all water has been removed. This will guard against freezing and rupturing of the components.

Section 8 Troubleshooting Guide

PROBLEM	PROBABLE CAUSE	REMEDY	PAGE REF.
1. Soft lock message appears on display.	a. An equipment fault has occurred.	a. Determine reason the failure occurred. Correct cause for failure, then select HEAT symbol to start a heat cycle or WASH to disassemble and brush clean the machine.	20
	b. More than 24 hours since the last HEAT cycle.	b. The freezer must go through a HEAT cycle every 24 hours. The freezer must now be disassembled and brush cleaned or placed in a heat cycle.	20
	c. The power switch is in the OFF position.	c. The power switch must be in the ON position. The freezer must now be disassembled and brush cleaned or placed in a heat cycle.	20
	d. The freezer is not in the AUTO or STANDBY mode when the heat cycle was programmed to start.	d. The freezer must be in the AUTO or STANDBY mode. The freezer must now be disassembled and brush cleaned or placed in a heat cycle.	20
	e. Mix out condition.	e. Level of mix in hopper must be up to fill line on agitator paddle. The freezer must now be disassembled and brush cleaned or placed in a heat cycle.	20
	f. The agitator is not installed.	f. The agitator must be cleaned and installed before starting the HEAT cycle. The freezer must now be disassembled and brush cleaned or placed in a heat cycle.	38
2. Hard lock message appears on display.	a. Brush clean interval exceeded.	a. The freezer must be disassembled and brush cleaned within 24 hours when the counter indicates one day remaining.	20
	b. A barrel or hopper thermistor is faulty.	b. Call an authorized service technician.	- - -

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PROBLEM	PROBABLE CAUSE	REMEDY	PAGE REF.
3. No product is being dispensed.	a. Low on mix. The MIX OUT light is on.	a. Add mix to the mix hopper. Return to AUTO mode.	37
	b. The power switch is in the OFF position.	b. Place the power switch to ON and select AUTO.	36
	c. The circuit breaker is off or the fuse is blown.	c. Turn the breaker on, or replace the fuse.	– – –
	d. Beater motor is out on reset, BEATER OVERLOAD message displayed.	d. Turn the machine off. Press the reset button. Restart the machine in AUTO.	- - -
	e. Machine not in AUTO mode.	e. Select AUTO and allow machine to cycle off before drawing product.	40
	f. Feed tube not properly installed.	f. Make sure feed tube is properly installed.	37
	g. Freeze-up in mix inlet hole.	g. Call an authorized service technician.	- - -
	h. The beater is rotating counterclockwise when observed from the operator end.	h. Contact service technician to correct rotation.	– – –
4. The product is too soft.	a. Draw rate is set too fast.	a. Adjust draw rate of 5 to 7 1/2 oz. (142 g. to 213 g.) of product by weight in 10 seconds.	31
	b. Not enough air space around unit. (Air cooled units)	b. Allow for adequate air flow across the condenser.	1
	c. Worn scraper blades.	c. Replace regularly.	50
	d. Dirty condenser (A/C)	d. Clean monthly.	44
	e. Mix is out of date.	e. Use only fresh mix.	- - -
	f. Loss of water. (W/C)	f. Locate cause of water loss and correct.	45
	g. Viscosity needs adjustment.	a. Contact service technician.	– – –

PROBLEM	PROBABLE CAUSE	REMEDY	PAGE REF.
5. The product is too thick.	a. Freezing cylinder not primed correctly.	a. Drain the freezing cylinder and reprime the machine.	37
	b. The viscosity control is set too cold.	b. Call an authorized service technician.	- - -
	c. Freeze-up in mix inlet hole.	c. Call an authorized service technician.	- - -
6. The mix in the hopper is too warm.	a. Hopper cover is not in position.	a. Clean and sanitize hopper cover and place in position.	37
	b. The agitator is not installed.	b. Clean and sanitize the agitator and install.	38
	c. The hopper temperature is out of adjustment.	c. Call an authorized service technician.	- - -
7. The mix in the hopper is too cold.	a. The hopper temperature is out of adjustment.	a. Call an authorized service technician.	- - -
8. Mix Low and Mix Out probes are not functioning.	a. Milkstone build-up in the hopper.	a. Clean hopper(s) thoroughly.	36
9. Product is collecting on top of the freezer door.	a. The top o-ring on draw valve is improperly lubricated or worn.	a. Lubricate properly or replace the o-ring.	33
10. Excessive mix leakage from door spout.	a. Missing or worn draw valve o-rings.	a. Install or replace regularly.	33/ 50
	b. Inadequate lubrication of draw valve o-rings.	b. Lubricate properly.	31/ 33
	c. Wrong type of lubricant is being used (example: petroleum base lubricant).	c. Use the proper lubricant (example: Taylor Lube).	29
11. Excessive mix leakage into the rear drip pan.	a. Missing or worn seal on drive shaft.	a. Install or replace regularly.	29/ 50
	b. The drive shaft seal is installed inside-out.	b. Install correctly.	29
.	c. Improper lubrication of drive shaft and/or seal.	a. Lubricate properly.	29
	d. The drive shaft and beater assembly work forward.	b. Call authorized service technician.	- - -
	e. Worn rear shell bearing.	c. Call authorized service technician.	– – –
	f. Gear box out of alignment.	d. Call authorized service technician.	- - -

PROBLEM	PROBABLE CAUSE	REMEDY	PAGE REF.
12. The drive shaft is stuck in the drive coupling.	a. Mix and lubricant collected in drive coupling.	a. Brush clean the rear shell bearing area regularly.	43
	b. Rounded corners of drive shaft, drive coupling, or both.	b. Call an authorized service technician.	- - -
	c. Gear box is out of alignment.	c. Call an authorized service technician.	- - -
13. The freezing cylinder walls are scored.	a. Missing or worn front bearing and scraper blades.	a. Install or replace the front bearing and scraper blades.	30
	b. The baffle rod on the freezer door is broken.	b. Replace freezer door.	30
	c. Beater assembly is bent.	c. Replace beater assembly.	30
	d. Gear box is out of alignment.	d. Call an authorized service technician.	- - -
14. The product makes a popping sound when drawn.	a. Draw rate is set too fast.	a. Adjust draw rate of 5 to 7 1/2 oz. (142 g. to 213 g.) of product by weight in 10 seconds.	31
	b. Freezing cylinder not primed correctly.	b. Drain the freezing cylinder and reprime the machine.	37
15. No control panel functions with power switch ON.	a. Machine is unplugged.	a. Plug into wall receptacle.	- - -
	b. Circuit breaker OFF or blown fuse.	b. Turn the breaker ON or replace the fuse.	- - -
16. No freezer operation after pressing the AUTO key.	a. Unit is unplugged.	a. Plug into wall receptacle.	– – –
	b. The circuit breaker is off or the fuse is blown.	b. Turn the breaker on, or replace the fuse.	– – –
	c. The beater motor is out on reset.	c. Reset the freezer.	17
17. Product is not feeding into the freezing cylinder.	a. Inadequate level of mix in the mix hopper.	a. Fill the mix hopper with mix.	37
	b. The mix inlet hole is frozen up.	b. The mix hopper temperature needs adjustment. Call service technician.	– – –

Section 9 Parts Replacement Schedule

PART DESCRIPTION	EVERY 3 MONTHS	EVERY 6 MONTHS	ANNUALLY
Scraper Blades	X		
Drive Shaft Seal	X		
Freezer Door Gasket	X		
Front Bearing	X		
Draw Valve O-Ring	X		
Mix Feed Tube O-Ring	X		
Air Orifice O-Ring	X		
White Bristle Brush, 3” x 7”		Inspect & Replace if Necessary	Minimum
White Bristle Brush, 1” x 2”		Inspect & Replace if Necessary	Minimum
Black Bristle Brush, 1” x 2”		Inspect & Replace if Necessary	Minimum
Double-Ended Brush		Inspect & Replace if Necessary	Minimum
Yellow Bristle Brush		Inspect & Replace if Necessary	Minimum

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Section 10 Warranty Explanation

Class 103 Parts

The warranty for new equipment Class 103 parts is one year from the original date of unit installation, with a replacement parts warranty of three months.

Class 212 Parts

The warranty for new equipment Class 212 parts is two years from the original date of unit installation, with a replacement parts warranty of twelve months.

Class 512 Parts

The warranty for new equipment Class 512 parts is five years from the original date of unit installation, with a replacement parts warranty of twelve months.

Class 000 Parts

Class 000 parts are considered wear items - no warranty.

Class *** Parts

See warranty explanation on the back of the check-out card.

CAUTION: Warranty is valid only if the parts are authorized Taylor parts, purchased from an authorized Taylor Distributor, and the required service work is provided by an authorized Taylor service technician.

Taylor reserves the right to deny warranty claims on equipment or parts if non-approved parts or refrigerant were installed in the machine, system modifications were performed beyond factory recommendations, or it is determined that the failure was caused by neglect or abuse.

DESCRIPTION	PART NUMBER	C709 QTY.	C717 QTY.	WARR. CLASS	REMARKS
ACTUATOR A.-DRAW SWITCH	X69835		1	103	S/N M1104867 & UP
ARM-DRAW SWITCH-LEFT	069166		1	103	
ARM-DRAW SWITCH-RIGHT	069167		1	103	
BRACKET A.-SPRING-RETURN	X69481		1	103	
BRACKET A.-SWITCH C71X	X69836		1	103	
E-RING 1/4	032190		4	000	
PIN-PIVOT-DRAW SWITCH	038484		1	103	
ROD-SPRING RETAINER	038254-SP		1	103	
SCREW-ADJUSTMENT-DRAW PAD	069374		2	000	
SPRING-EXTENSION.467X.062	069392		2		
SPRING-RETURN-LEFT-TWIN TWIST	038923		1	103	
SPRING-RETURN-RIGHT-TWIN TWIST	038924		1	103	
ACTUATOR A.-DRAW SWITCH	X62401		1	103	S/N M1104866 & PRIOR DRAW SW LESS SW-LEVER
ARM-SWITCH-DRAW-L	038649		1	103	
ARM-SWITCH-DRAW-R	038650		1	103	
BRACKET A.-SPRING RETURN	X38257		1	103	
E-RING 1/4	032190		4	000	
PIN-PIVOT-DRAW SWITCH	038484		1	103	
ROD-SPRING RETAINER	038254		1	103	
SPRING-EXTENSION.500X.054X1.00	067352		2	103	REPLACES 038922
SPRING-RETURN-LEFT-TWIN TWIST	038923		1	103	
SPRING-RETURN-RIGHT-TWIN TWIST	038924		1	103	
+SWITCH A.-DUAL LEVER	X69838		1	103	S/N M1104867 & UP
ACTUATOR-TANDEM LEAF	062408		2	103	
BRACKET-SWITCH	069839		1	103	
SCREW-4-40X1" TAPTITE PAN HD	045141		4	103	
SWITCH-LEVER-SPDT-10A-125	028889		4	103	
BEARING-FRONT	050216	1	2	000	
BEARING-REAR SHELL-NICKEL	031324	1	2	000	
+GUIDE-DRIP SEAL	028992	1	2	000	
+NUT-BRASS BEARING	028991	1	2	000	
+WASHER-BEARING LOCK	012864	1	2	000	

+ Available Separately

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+ Available Separately

DESCRIPTION	PART NUMBER	C709 QTY.	C717 QTY.	WARR. CLASS	REMARKS
BEATER A.-3.4QT-HELICORE	X31761	1	2	103	
+BLADE-SCRAPER-PLASTIC 17L	035174	2	4	000	
BELT-AX39	023874	2		000	208-230V 60HZ 1PH
BELT-AX40	023875	2		000	220-240V 50HZ 1PH
BELT-AX30	052191		4	000	
BLADE A.-AGITATOR C708	X56591	1	2	103	
BLOCK-TERMINAL & FUSE	062351		2	103	
BLOCK-TERMINAL 2P .25 SPADE	051644	1		103	
BLOCK-TERMINAL 2P-L1,L2	039422	1	2	103	208-230V 60HZ 1PH
BLOCK-TERMINAL-PLUG 2P .2 SIP	068277		4	103	208-230V 60HZ 1PH
BLOCK-TERMINAL 3P-L1,L2,L3	039423	1		103	208-230V 60HZ 3PH
BLOCK-TERMINAL 2P-L1,N	039421	1		103	220-240V 50HZ 1PH
BLOCK-TERMINAL 3P 20A, 300V	051331	1		103	208-230V 60HZ 1PH
BLOCK-TERMINAL 7P GREEN	024156	1		103	220-240V 50HZ 1PH
BLOCK-TERMINAL & FUSE	062351		2	103	208-230V 60HZ 1PH
BLOWER-100 CFM	012796-27		1	103	208-230V 60HZ 1PH
BOTTLE-WASH-PLASTIC	044818	1		000	
BRUSH-REAR BRG 1"D X 2"LG	013071	1	1	000	
BRUSH-DBL END	013072	1	1	000	
BRUSH-DRAW VALVE 1"OD X 2"X1	013073	1	1	000	
BRUSH-MIX PUMP BODY-3" X 7"	023316	1	1	000	
BRUSH-END-DOOR-SPOUT-SS-HT	039719	1	1	000	
CABLE-2 COND-#22 UNSHIELDED	051696-18	1	2	103	
CABLE-RIBBON-50C-25"L.DIL/DIL	040040-025		1	103	
CABLE-RIBBON-14C-14"L SIP/SIP	040040-015	1		103	PCB TOUCH PAD DISPLAY-DEC PLATE
CABLE-RIBBON-14C-3"L-SIL/SIL	056864		1	103	DEC PLATE C717
CABLE-RIBBON-20C-14"L-DIL/DIL	040040-040	1	1	103	J2C TO J12IF
CABLE-RIBBON-20C-17"L-DIL/DIL	040040-013		1	103	
CABLE-RIBBON-20C-18"L-DIL/DILR	040040-042	1		103	J7C TO J9IF
CABLE-RIBBON-20C-16"L-DIL/DIL	040040-049		1	103	
CABLE-RIBBON-50C- 5"L-DIL/DI	040040-010	1		103	
CABLE-RIBBON-50C-10"L-DIL/DIL	040040-058		1	103	

+ Available Separately

DESCRIPTION	PART NUMBER	C709 QTY.	C717 QTY.	WARR. CLASS	REMARKS
CABLE-RIBBON-50C-20"L-DIL/DIL	040040-011	1		103	J10C TO J2IF DEC PLATE
CABLE-CONTROL/INTERFACE	069023		1	103	UVC4
CABLE-USB	056785	1	1	103	UVC3 - PCB TOUCH PAD DISPLAY DEC PLATE
CASTER-4" SWV 3/4-10 STEM	044106		2	103	
CASTER-4" SWV 3/4-10 STEM W/BRAKE	046437		2	103	7-15-10
COMPRESSOR L64A113BBCA	048259-27E	1	2	512	208-230V 60HZ 1PH - BRISTOL
+CAPACITOR-START 189-227UF/33	033044-1	1	2	103	
+CAPACITOR-RUN 25UF/440V	037431	1	2	103	
+RELAY-START-COMPRESSOR	062363	1	2	103	
COMPRESSOR L63A113DBLA	048259-33	1	2	512	208-230V 60HZ 3PH
CONDENSER-AC 16X16 3 ROW 14FPI	056944	1		103	
CONDENSER-AC 12LX18HX3.12T-5RW	055813-1		1	103	
CONDENSER-AC 12LX18HX3.12T-5RW	055813-2		1	103	
PCB A.-CONTROL *C716-C717 UVC4	X69354-SER		1		C717 S/N M1066352 & UP
CONTROL-UVC4	X68114-SER		1		
+MODULE-PROGRAM C708/C709 UVC4	X40625		1		USB
PCB A.-CONTROL *C716* UVC4 CONV KIT	X69356SER1		1		S/N M1066351 & PRIOR
CONTROL-UVC3 SURFACE MOUNT-PWM	062529-SER		1	212	C717 S/N M1066351 & PRIOR USE X69356SER1 PCB
CHIP-SOFTWARE UVC3 CS	X40820-SER		1	103	
COUPLING-DRIVE 3/4 HEX X 1-7/8	012721	1	2	103	
COVER-HOPPER *BLACK*		1	2	103	**SEE KIT A.-COVER HOPPER
+PIN-RETAINING-HOPPER COVER		4	2	103	
DECAL-INST-CLN HPR	019029	1		000	
DECAL-TROUBLESHOOT	038374	1	1	000	
DIAGRAM-WIRING *C708/C709*	057010-27	1		000	208-230V 60HZ 1PH
DIAGRAM-WIRING *C708/C709*	057010-33	1	1	000	208-230V 60HZ 3PH
DIAGRAM-WIRING *C708/C709*	057010-40	1		000	220-240V 50HZ 1PH
DIAGRAM-WIRING *C708/C709*	057010-58	1		000	380-415 50HZ 3N~
DIAGRAM-WIRING *C717*	059901-27		1	000	208-230V 60HZ 1PH
DIAGRAM-WIRING *C717*	059901-33		1	000	208-230V 60HZ 3PH
DIAGRAM-WIRING *C717*	059901-40		1	000	220-240V 50HZ 1PH
DIAGRAM-WIRING *C717*	059901-58		1	000	380-415 50HZ 3N~

+ Available Separately

DESCRIPTION	PART NUMBER	C709 QTY.	C717 QTY.	WARR. CLASS	REMARKS
DOOR A.-W/BAFFLE	X57332-SER	1		103	
+BEARING-FRONT	050216	1		000	
+GASKET-DOOR-4"-DART	048926	1		000	
+HANDLE A.-DRAW	X56246	1		103	
+O-RING-1/4 OD X .070W	015872	1		000	
+SCREW-ADJUSTMENT-5/16-24	056332	1		103	
+PIN-HANDLE-SS	055819	1		103	
+VALVE A.-DRAW	X55820	1		103	
+O-RING-7/8 OD X .103W	014402	3		000	
DOOR A.-3SPT*HT*LG BAF*W/O PRG	X59923-SER		1	103	
+BEARING-FRONT	050216		2	000	
+DECAL-DOOR-3 SPOUT-TWIN TWIST	062239		1	000	
+GASKET-DOOR-4"-DART	048926		2	000	
+HANDLE A.-DRAW *C602*	X56421-1		3	103	
+O-RING-1/4 OD X .070W	015872		3	000	
+SCREW-ADJUSTMENT-5/16-24	056332		3	103	
+PIN-HANDLE-TWIN	059894		1	103	
+VALVE A.-DRAW-L & R	X59888		2	103	
+O-RING-7/8 OD X .103W	014402		6	000	
+VALVE A.-DRAW-CENTER	X59890		1	103	
+O-RING-7/8 OD X .103W	014402		6	000	
+SEAL-DRAW VALVE	034698		1	000	
DRYER-FILTER-HP62-3/8 X 1/4S	048901	1		000	
DRYER-FILTER 3/8 X 3/8SOL HP	049154		2	000	
DVD-OPS TRAIN VIDEO *C709*	066247-DVD	1	1	000	
EYELET-RESET BUTTON	013739	1	4	103	
FASTENER-DOOR LATCH	030787	2	4	000	
FASTENER-DOOR STRIKE	030788	2	4	000	
FILTER-AIR-21.688X15.813HX.70W	052779-9	1		000	
FILTER-AIR-POLY-FLO	052779-11		2	000	
FILTER-CORCOM 6EH1	040140-001	1	1	103	
GASKET-BASE PAN	056934	1		000	

+ Available Separately

DESCRIPTION	PART NUMBER	C709 QTY.	C717 QTY.	WARR. CLASS	REMARKS
+SCREW-10X7/16 UNSLOTTED	066234	10		000	
GEAR A.*REDUCER 4.21:1	021286-SER	1	2	212	
GUARD-POWER SWITCH	034830	1	1	103	
GUIDE A.-DRIP PAN	X28863	1		103	
GUIDE A.-DRIP PAN-CENTER	X59913		1	103	
GUIDE A.-DRIP PAN-LEFT	X59910		1	103	
GUIDE A.-DRIP PAN-RIGHT	X59911		1	103	
HARNESS-WIRE-MAIN POWER	058285-27G	1		103	
HARNESS-WIRE-BEATER MOTOR	057725-27G	1		103	
HARNESS-WIRE-MX PRB-CONT SW	057723-SP	1		103	
HARNESS-WIRE-THERMISTOR PROBES	057728	1		103	
HARNESS-WIRE-SOL VLV/FAN MTR	068351	1		103	
HARNESS-WIRE-LW V-MIX HOPPER	062050		1	103	
HARNESS-WIRE-BEATER MTR	066440-27G		2	103	
HARNESS-WIRE-LW V-CNTRL	067822		1	103	
HARNESS-WIRE-POWER SWITCH	062051		1	103	
HARNESS-WIRE-SOLENOID	066107		2	103	
HOUSING A.-AGITATOR	X56586-03	1	2	103	COMPLETE WITH HOUSING
CAPACITOR-MOTOR-AGITATOR	056589-J	1	2	103	
MAGNET A.-AGITATOR	X57341	1	2	103	
MOTOR-AGITATOR-24VAC 50/60	050535-03	1	2	103	
+CAPACITOR-MOTOR-AGITATOR	057525	1	2	103	
SCREW-8-32X3/16 ALLEN SET	006812	1	2	000	
O-RING-1-3/8 OD X .070W	017395	1	2	000	
SCREW-4-40X1/4 SOC SS	600165	8	8	000	
JACK A.-FLAVORBURST	X56353	1	2	103	
KIT A.-COVER-HOPPER*SINGLE*BLK	X65368	1		103	
LABEL-CAUTION-AGITATOR	045191	1		000	
KIT A.-COVER-HOPPER*DUAL*BLK	X67061		1	103	
LABEL-CAUTION-AGITATOR	045191		2	000	
KIT A.-TUNE UP *1SPOUT* *C709*	X49463-92	1		000	
BEARING-FRONT	050216	1		000	

+ Available Separately

DESCRIPTION	PART NUMBER	C709 QTY.	C717 QTY.	WARR. CLASS	REMARKS
GASKET-DOOR HT 4"-DOUBLE	048926	1		000	
O-RING-7/8 OD X .103W	014402	3		000	
O-RING-1/4 OD X .070W	015872	1		000	
O-RING-3/8 OD X .070W	016137	1		000	
O-RING-.291 ID X .080W	018550	3		000	
O-RING-.643 OD X .077W	018572	2		000	
SEAL-DRIVE SHAFT	032560	1		000	
TOOL-O-RING REMOVAL-FREEZER	048260-WHT	1		000	
KIT A.-TUNE UP-3 SPT C717	X49463-79		1	000	
BEARING-FRONT	050216		2	000	
CAP-DESIGN 1.010"ID-6 POINT	014218		3	000	
GASKET-DOOR-4"-DART	048926		2	000	
O-RING-7/8 OD X .103W	014402		7	000	
O-RING-.291 ID X .080W	018550		6	000	
O-RING-.643 OD X .077W	018572		4	000	
SEAL-DRIVE SHAFT	032560		2	000	
SEAL-DRAW VALVE	034698		1	000	
TOOL-O-RING REMOVAL-FREEZER	048260-WHT		1	000	
LABEL-CAUTION-GRD-PERM-ENG/SPAN	032164	1	1	000	
LABEL-CAUTION-BTR STRT G3	039897		1	000	
LABEL-CAUTION-AGITATOR	045191	1	2	000	
LABEL-DOOR-MOVE PART	032749	1	1	000	
LABEL-SW-POWER-OFF/ON-SYMBOLS	052632	1	1	000	
LABEL-WARN-ELEC-SGL-SMALL	032717	1	1	000	
LABEL-WARN-COVER	051433	4	5	000	
LIP-DRIP	057870	1		000	
LIP-DRIP-NOSE CONE	036435		1	000	
LUBRICANT-TAYLOR HI PERF-4 OZ	048232	1	1	000	
MAN-OPER C709/C717	062080-M	1	1	000	
MOTOR-1.5 HP CAPS@8&10 O'CLOCK	056865-27	1		212	208-230V 60HZ 1PH
MOTOR-1.5 HP CAPS@10&2 O'CLOCK	021522-27		2	212	208-230V 60HZ 1PH
MOTOR-1.5 HP	021522-33	1	2	212	208-230V 60HZ 3PH

+ Available Separately

DESCRIPTION	PART NUMBER	C709 QTY.	C717 QTY.	WARR. CLASS	REMARKS
MOTOR-AGITATOR-24VAC 50/60	050535-03	1	2	103	SEE HOUSING ASSEMBLY
MOTOR-FAN W/4 BLADE 185W	500302-27	1		103	
+CAPACITOR-RUN 4.0UF/400V	500311	1		103	
NUT-STUD-BLACK 2.563 LONG	058764	2	2	103	
NUT-STUD-BLACK 3.250 LONG	058765	2	2	103	
ORIFICE	022465-100	1	2	103	
+O-RING-3/8 OD X .070W	016137	1	2	000	
PAIL-MIX 10 QT.	013163	1	1	000	
PAN-DRIP 11-5/8 LONG	027503	1		103	
PAN-DRIP 19-1/2 LONG	035034		1	103	
PAN-DRIP 12.5	059736		2	103	N/A MUST USE 063877 & X59836 PANEL
PANEL A.-FRONT-LOWER	X58955	1		103	
PANEL A.-FRONT-UPPER	X59423	1		103	
PANEL A.-SIDE-RIGHT	X57871	1		103	
PANEL-SIDE-LEFT	056963-SP1	1		103	
PANEL-REAR C707 C709	056077-SP1	1		103	
PANEL A.-FRONT	X63879		1	103	S/N K6021998 & UP
PANEL A.-FRONT	X59836		1	103	TOP OF UNIT - NOSE CONE
PANEL A.-FRONT LOWER	X59854-SER		1	103	
PANEL A.-FILTER-LOUVERED	X59928		2	103	
PANEL-SIDE-LEFT *C712/C717*	059906		1	103	
PANEL-SIDE-RIGHT *C712/C717*	059907		1	103	
PANEL-REAR *C713/C717*	059917		1	103	
PCB A.-CONTROL UVC4	X69354-SER	1		212	C709 S/N M1084626 & UP
CONTROL-UVC4	X68114-SER	1		212	
+MODULE-PROGRAM C708/C709 UVC4	X40625	1			USB
PCB A.-CONTROL *C708* UVC4 CONV KIT	X69354SER1				C709 S/N M1084625 & PRIOR
PCB A.-CONTROL *C708* UVC3SM	X59209-SER	1		212	C709 S/N M1084625 & PRIOR USE X69354SER1
CONTROL-UVC3 SURFACE MNT-PWM	062529-SER	1		212	
CHIP-SOFTWARE C708 UVC3SM	X40828-SER	1		103	
PCB A.-INTERFACE-HT-SS-UK	X58505-SER	1		212	
PCB A.-PERSONALITY-HT-SS	X46904-SER	1		212	

+ Available Separately

DESCRIPTION	PART NUMBER	C709 QTY.	C717 QTY.	WARR. CLASS	REMARKS
PCB A.-HT INTERFACE BASE	X58482-SER	1		212	
CHIP-SOFTWARE MIX LEVEL	X40799-SER	1		212	
PCB A.-INTERFACE *C708/C709* ROHS	X63929-SER	1		103	DEC PLATE *REPLACES X57177-SER
CHIP-SOFTWARE	X40821-SER	1		103	
PCB A.-CONTROL *C716-C717 UVC4	X69354-SER		1		C717 S/N M1066352 & UP
CONTROL-UVC4	X68114-SER		1		
+MODULE-PROGRAM C708/C709 UVC4	X40625		1		USB
PCB A.-CONTROL *C716* UVC4 CONV KIT	X69356SER1		1		S/N M1066351 & PRIOR
CONTROL-UVC3 SURFACE MOUNT-PWM	062529-SER		1	212	C717 S/N M1066351 & PRIOR USE X69356SER1 PCB
CHIP-SOFTWARE UVC3 CS	X40820-SER		1	103	
PCB A.-INTERFACE	X59435-SER		1	212	
PCB A.-PERSONALITY-HT-SS	X46904-SER		1	212	
PCB A.-INTERFACE-HOT GAS	X59485-SER		1	212	
CHIP-SOFTWARE MIX LEVEL	X40799-SER		1	103	
PCB A.-INTERFACE*C712-C717*ROHS	X63925-SER		1	212	DEC PLATE
PLATE-DEC *C709*	058859	1		103	
+GASKET-DEC PLATE	056991	1		000	
+SCREW-6-32X7/8 RHM	007017	4		000	
+ WASHER-#6 FLAT STNLS	023546	4		000	
PLATE-DEC *C717* SYRUP RAIL	062124		1	103	MIX LOW
PLUG-DRIP TRAY HOLE	029595	1		103	MIX OUT
PROBE A.-MIX	X56912	1	2	103	
PROBE-MIX OUT *C708*	056908	1	2	103	6"PROBE W/96"LEADS BLACK/YELLO
+O-RING-1-3/8 OD X .070W	017395	3	6	000	
PROBE-THERMISTOR-BARREL-2% TOL	038061-BLK	1		103	
PROBE-THERMISTOR-HOPPER-2% TOL	039470-BLK	1	2	103	
+CLIP-RETAINING THERMISTOR	066099	1	2	000	
PULLEY-2AK22 X .625-.6265	016403	1	2	103	
PULLEY-2AK74-5/8	027822	1		103	
PULLEY-2AK64-5/8 BORE	039695		2	103	
RELAY-3 POLE-20A-208/240 50/60	066795-33	1	2	103	
RELAY-DPDT 100UA TO 7A 1/8HP	052111-03	1	2	103	

+ Available Separately

DESCRIPTION	PART NUMBER	C709 QTY.	C717 QTY.	WARR. CLASS	REMARKS
RELAY-DPDT-24VAC-30A@277V	054703-03	2		103	
SANITIZER-STERA SHEEN -GREEN	055492	1	1	000	
SHAFT-BEATER	056078	1		103	
+SEAL-DRIVE SHAFT	032560	1		000	
SHAFT-BEATER	032564		2	103	
+SEAL-DRIVE SHAFT	032560		2	000	
SHELF-TRAY-DRIP	056076	1		103	
SHELF-TRAY-DRIP-SHELF	063877		1	103	
SHELL A.-INSULATED *C709*	X58858-SER	1		512	
STUD-NOSE CONE	055987	4		103	
SHELL A.-INSULATED *C717*	X63819		1	512	
+STUD-NOSE CONE	055987		4	103	
SHIELD-SPLASH *RD30*	049203	1		103	
SHIELD-SPLASH-WIRE-19-3/4 L	033813		1	103	
SHROUD A.-CONDENSER *C708/C709	X56922	1		103	
STARTER-1 PHASE 6.3 TO 10 AMP	066794-27K	1	2	103	208-230V 60HZ 1PH & 220-240V 50HZ 1PH
STARTER-3 PHASE 4 TO 6.5 AMP	066794-33J	1	2	103	208-230V 60HZ 3PH - 3 WIRE & 220-240V 50HZ 3PH
STARTER-3 PHASE 2.5 TO 4 AMP	066794-33H	1	2	103	380-415V 50HZ 3N~ (4WIRE)
STARTER-3 PHASE 1.6 TO 2.5 AMP	066794-33G	1	2	103	460V 60HZ 3PH
STRAINER-CONE MESH-1/4 ODF	062298	3	6	000	
STRAINER-CONE MESH 1/2 ODF	062299	2	4	000	
SWITCH A.-DRAW	X56147	1		103	
ARM A.-DRAW	X56253	1		103	
E-RING 3/16 .335 O.D.	049178	1		000	
INSULATOR-SWITCH 1/64 ARMITE	029099	2		000	
NUT-4-40 HEX -PLATED-	038623	2		000	
PIN-PIVOT	015478	1		103	
SCREW-4-40X1 RD HD STEEL-ZP	028890	2		000	
SPRING-RETURN-LEFT-SELF CLOSE	041660	1		103	
SPRING-RETURN-RIGHT-SELF CLOSE	041661	1		103	
SWITCH-LEVER-SPDT-10A-125-250V	028889	2		103	
SWITCH A.-DUAL LEVER *C71	X69838		1	103	S/N M1104867 & UP

+ Available Separately

DESCRIPTION	PART NUMBER	C709 QTY.	C717 QTY.	WARR. CLASS	REMARKS
ACTUATOR-TANDEM LEAF	062408		2	103	
BRACKET-SWITCH	069839		1	103	
SCREW-4-40X1" TAPTITE PAN HD	045141		4	103	
SWITCH-LEVER-SPDT-10A-125-25	028889		4	103	
SWITCH A.-DUAL LEVER	X62400		1	103	S/N M1104866 & PRIOR
ACTUATOR-TANDEM LEAF	062408		2	103	
BRACKET-SWITCH	062394		1	103	
SCREW-4-40X1" TAPTITE PAN HD	045141		4	103	
SWITCH-LEVER-SPDT-10A-125-25	028889		4	103	
SWITCH-PRESSURE 440 PSI-SOLDER	048230	1		103	
SWITCH-PRESS 220 CO/270 CI	064282	1		103	
SWITCH-PRESSURE 350 PSI-SOLDER	048231		2	103	
SWITCH-REED*DOOR INTERLOCK*68"	056771	1	1	103	
SWITCH-TOGGLE-DPDT*VDE APPROVED	054809	1		103	
SWITCH-TOGGLE-3PDT*ON-NONE-ON	068221		1	103	
TRANS.-120/208/240V PRI 24VSEC	051660	1	1	103	
TRANS.-CONT.-32VA 120/200/240V	054834	1	1	103	
TRAY-DRIP *C706/C707*BLACK	056858	1		103	
TRAY-DRIP-19-5/8 L X 4-7/8	033812		1	103	S/N K6021998 & UP
TRAY-DRIP-SHELF *C716*	063877		1	103	
TRIM-CORNER-REAR-LEFT *C708*	056964	1		103	
TRIM-CORNER-REAR-RIGHT *C708*	056965	1		103	
TRIM-CORNER-REAR-L	059896		1	103	
TRIM-CORNER-REAR-R	059897		1	103	
TUBE A.-FEED-SC-INNER-5/3	X32824-2	1		103	
+O-RING-.291 ID X .080W	018550	3		000	
TUBE A.-FEED-OUTER-HT	X34641	1	2	103	
+O-RING-.643 OD X .077W	018572	2	4	000	
TUBE A.-FEED-SC-INNER-5/3	X32824-3		2	103	
+O-RING-.291 ID X .080W	018550		4	000	
VALVE-ACCESS-1/4MFL X 3/8OD SOLDER	053565	2	4	103	
VALVE-EXP-AUTO-1/4S X1/4 FPT	046365	1	2	103	

+ Available Separately

DESCRIPTION	PART NUMBER	C709 QTY.	C717 QTY.	WARR. CLASS	REMARKS
+BOOT-VALVE-EXPANSION	027137	2	4	000	CRANK CASE PRESSURE REGULATOR
VALVE-INLET PRESS.REG	065371-1	1	2	103	REPLSCES 057009 EPR VALVE
VALVE-LIQUID INJ-HT GAS	057075-1	1	2	103	
VALVE-OUTLET PRESS.REG	064347-1	1	2	103	REPLACES 057008 OPR VALVE
VALVE-SOL 1/8ORF 1/4 IN X 3/8 OUT	053511-27	1	2	103	
VALVE-SOLENOID 7/16 ORF 5/8 ODF	048626-27	1	2	103	HOPPER
COIL-SOLENOID VALVE ARMS	043449-27C	1	2	103	
VALVE-SOLENOID 7/64ORF X 1/4S	043449-27	4	8	103	HOPPER
COIL-SOLENOID VALVE ARMS	043449-27C	4	8	103	
VALVE-THERMOSTATIC	057002	1	2	103	
WATER COOLED					
BLOWER A.	X62380-27G		1	103	
BRACKET A.-MOUNTING CONDENSER	X58931	1		000	
BRACKET-VALVE-W/C	058440	1		103	
CONDENSER-WC-COAX	047540-1	1		103	
CONDENSER-WC-COAX	047540		2	103	
DEFLECTOR-BLOWER-EXHAUST	059929		1	103	
FAN-5 BLADE 7 " PUSH 30 DEG CW	016289	1		103	
GUARD-BLOWER	022505		1	103	
HOSE-RUBBER 1/2 ID X 7/8 OD	R50200	5	10	000	
MOTOR A.-FAN WC	X59307-27	1		000	
MOTOR-FAN 9 WATT 1550 RPM	012768-27	1		103	
BRACKET-FAN	038641	1		103	
SCREW-8-36X3/8 SLOT HEX WASH	046137	5		000	
OUTLET A.-TEE	X25900		1	103	
PANEL-SIDE-RIGHT-WC	058932	1		000	
PANEL-SIDE-L. W/C	062160		1	103	
PANEL-SIDE-R. W/C	062161		1	103	
PLATE-CONDENSER W/C	062043		1	103	
PLATE A.-MOUNTING-COUPLING	X58935	1		103	
SWITCH-PRESSURE 350 PSI-SOLDER	048231	1	1	103	
TEE-3/8" PIPE WATER VALVE	032953		1	103	

+ Available Separately

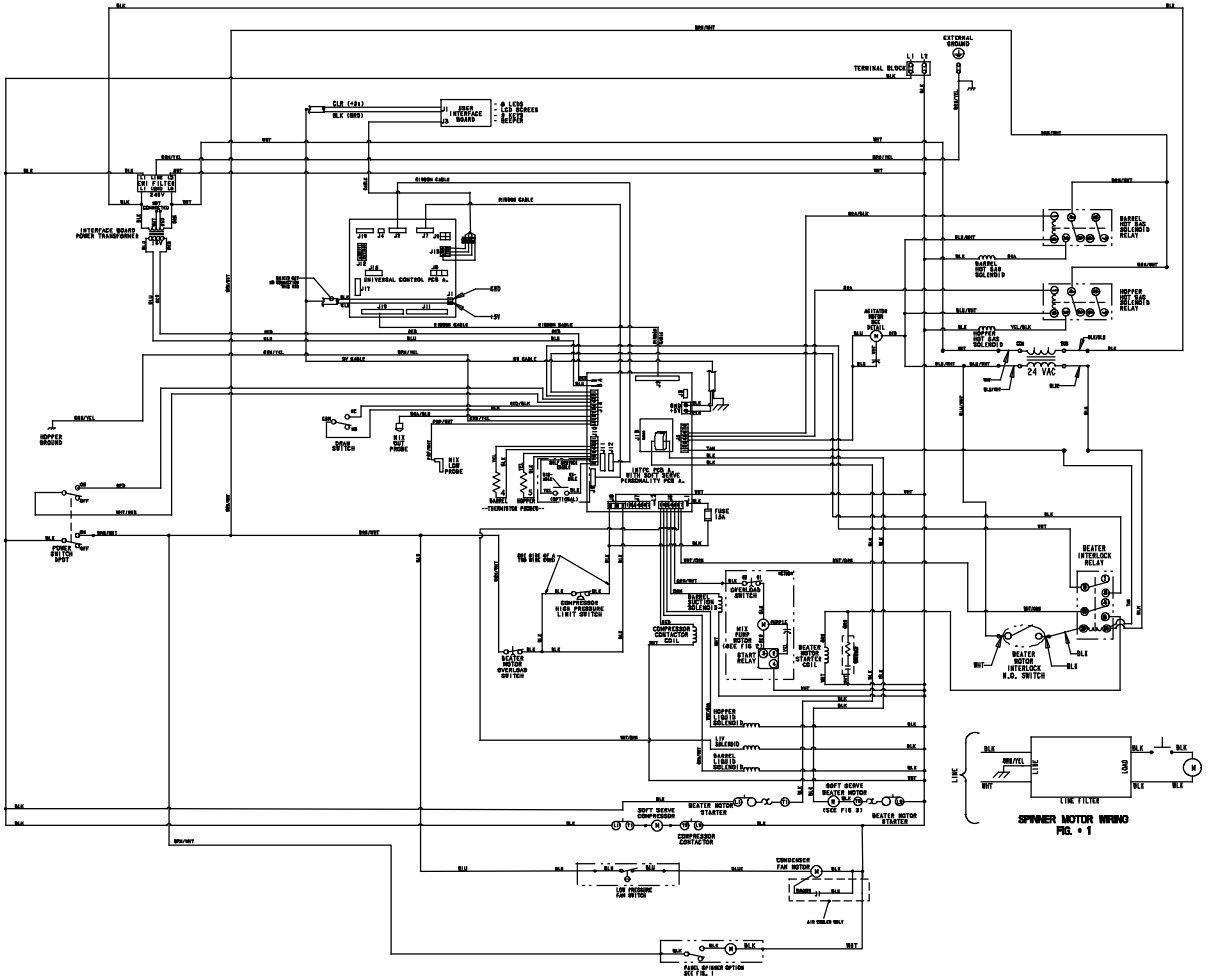
DESCRIPTION	PART NUMBER	C709 QTY.	C717 QTY.	WARR. CLASS	REMARKS
VALVE-WATER 3/8 REG/HEAD PRESSURE	046686	1	2	103	
TOP AIR DISCHARGE					
PANEL A.-SIDE-RIGHT	X57869-SER	1		103	
BELT-AX31	041575		4	000	220-240V 50HZ 1PH/200V 50/60HZ 3PH/380-415V 50HZ 3N ~4WIRE
BLOCK-TERMINAL 7P GREEN	024156	1		103	220-240V 50HZ 1PH/200V 50/60HZ 3PH/380-415V 50HZ 3N ~4WIRE
BLOCK-TERMINAL 2P L1,N	039421	1		103	220-240V 50HZ 1PH
BLOCK-TERMINAL 3P L1,L2,L	039423	1	2	103	200V 50/60HZ 3PH
BLOCK-TERMINAL 4P L1,L2,L3,N	039424	2		103	380-415V 50HZ 3N~ (4WIRE)
CAPACITOR A.-RF	X58666	1		000	220-240V 50HZ 1PH
COMPRESSOR L63A113DBLA	048259-33		2	512	220-240V 50HZ 3PH
COMPRESSOR L63A113BBKA	048259-40	1	2	512	220-240V 50HZ 1PH
+CAPACITOR-RUN 25UF/370VAC	023739	1		103	220-240V 50HZ 1PH
+CAPACITOR-START 161-193UF	031790	1		103	220-240V 50HZ 1PH
+RELAY-START-COMPRESSOR	038146	1		103	220-240V 50HZ 1PH
COMPRESSOR L63A113DBEA	048259-58	1	2	512	380-415V 50HZ 3N~ (4WIRE)
CONTROL-INTERF-HT-SS-C712-ROHS	X63967-SER		2	212	220-240V 50HZ 1PH/200V 50/60HZ 3PH/380-415V 50HZ 3N ~4WIRE
PCB A.-ROHS-PERSONALITY-HT-SS	X63922-SER		2	212	
DIAGRAM-WIRING *C708/C709	057010-39	1		000	200V 50/60HZ 3PH
DIAGRAM-WIRING *C708/C709	057010-40	1		000	220-240V 50HZ 1PH
DIAGRAM-WIRING *C708/C709	057010-58	1		000	380-415V 50HZ 3N~ (4WIRE)
DIAGRAM-WIRING *C717*	059901-35		1	000	220-240V 50HZ 3PH
DIAGRAM-WIRING *C717*	059901-40		1	000	220-240V 50HZ 1PH
DIAGRAM-WIRING *C717*	059901-58		1	000	380-415V 50HZ 3N~ (4WIRE)
HARNESS-WIRE	065436-58	1		103	380-415V 50HZ 3N~ (4WIRE)
HARNESS-WIRE	06543640SP		1	103	220-240V 50HZ 1PH
HARNESS-WIRE-BEATER MOTOR	057725-33G	1		103	200V 50/60HZ 3PH / 380-415V 50HZ 3N~4WIRE
HARNESS-WIRE-BEATER MTR	066440-33G		2	103	220-240V 50HZ 3PH / 380-415V 50HZ 3N
HARNESS-WIRE-CAP/RELAY	058864-G	1		103	220-240V 50HZ 1PH
HARNESS-WIRE-COMPRESSOR	059245-G	1		103	200V 50/60HZ 3PH / 380-415V 50HZ 3N~4WIRE

+ Available Separately

DESCRIPTION	PART NUMBER	C709 QTY.	C717 QTY.	WARR. CLASS	REMARKS
HARNESS-WIRE-COMPRESSOR	066436-33G		2	103	220-240V 50HZ 3PH / 380-415V 50HZ 3N
HARNESS-WIRE-MAIN POWER	058285-33G	1		103	200V 50/60HZ 3PH
HARNESS-WIRE-MAIN POWER	058285-40	1		103	220-240V 50HZ 1PH
HARNESS-WIRE-MAIN POWER	058285-58	1		103	380-415V 50HZ 3N~ (4WIRE)
HARNESS-WIRE-SOL VLV/FAN	068351-G	1		103	220-240V 50HZ 1PH/200V 50/60HZ 3PH/380-415V 50HZ 3N ~4WIRE
HARNESS-WIRE-SOLENOID	066107-G		2	103	220-240V 50HZ 1PH/200V 50/60HZ 3PH/380-415V 50HZ 3N ~4WIRE
LABEL-CK MOTOR ROTATE	020090	1	1	000	200V 50/60HZ 3PH / 380-415V 50HZ 3N~4WIRE
LABEL-3PH MOTOR PROT/1PH	025949	1	1	000	200V 50/60HZ 3PH / 380-415V 50HZ 3N~4WIRE
MOTOR-1.5 HP	021522-33	1		212	200V 50/60HZ 3PH
MOTOR-1.5 HP CAPS@10&2 O'CLOCK	021522-34		2	212	220-240V 50HZ 1PH
MOTOR-1.5 HP CAPS@8&10 O'CLOCK	056865-34	1		212	220-240V 50HZ 1PH
MOTOR-1.5 HP	021522-35	1	2	212	220-240V 50HZ 3PH/380-415V 50HZ 3N~
PCB A.-INTERFACE-HT-SS-UK ROHS	X63966-SER	1		212	220-240V 50HZ 1PH/200V 50/60HZ 3PH/380-415V 50HZ 3N ~4WIRE
PCB A.-ROHS-PERSON-HT-SS	X63922-SER	1		212	
PCB A.-ROHS-INTF BASE	X63928-SER	1		212	
PULLEY-2AK27 X .625-.6265	011545	1	2	103	220-240V 50HZ 1PH/380-415V 50HZ 3N~4WIRE
STARTER-3 PHASE 2.5 TO 4	066794-33H	1	2	103	220-24V 50HZ 3PH/380-415V 50HZ 3N~ (4WIRE)
STARTER-3 PHASE 4 TO 6.5	066794-33J	1		103	200V 50/60HZ 3PH / 220-240V 50HZ 1PH
SPRING-COMP.970X.113X1.5	032967		4	103	220-240V 50HZ 1PH/200V 50/60HZ 3PH/380-415V 50HZ 3N ~4WIRE

+ Available Separately

DESCRIPTION	PART NUMBER	C709 QTY.	C717 QTY.	WARR. CLASS	REMARKS
BK SPINNER - TOP AIR DISCHARGE (C70927FBK1)					
PANEL A.-SIDE-RIGHT	X57869-SER	1		103	
PANEL A.-FRONT-UPPER	X59423-SP1	1		103	
SPINNER A.-PANEL	X62383-27	1		103	
DISTRIBUTOR INSTALLED OPTIONS					
CART FOR *C706/C707/C708/	C20100-000				
CART FOR *C706/C707/C708/	C20100-AFA				
KIT A.-CONE DISPENSER-2/D	X48464				
KIT A.-CONE DISPENSER-4 T	X41141				
KIT A.-DECAL-FLAVORBURST	X59229-1				
KIT A.-DECAL-VANILLA C708	X59229-2				
KIT A.-HOPPER LOCK SINGLE	X57847				
KIT A.-LOCK-DRAW VALVE-SINGLE	X62568				
KIT A.-SYR RAIL-SD MT-DUAL	X48014-12H				
KIT A.-SYR RAIL-SD MT-DUAL	X48014-27H				
KIT A.-SYRUP RAIL *C708*F	X59454				
KIT A.-SYRUP RAIL	X58699-27				
KIT A.-SYRUP RAIL-SIDE MO	X48014-12				
KIT A.-SYRUP RAIL-SIDE	X48014-27				
LEG-4" 3/8-16 STUD	036397				
PANEL A.-FRONT-LOWER	X62282				
SPINNER A.-PANEL	X62383-27				
TOOL-APPLICATION-ROLLER	059234				



SPINNER MOTOR WIRING
FIG. # 1

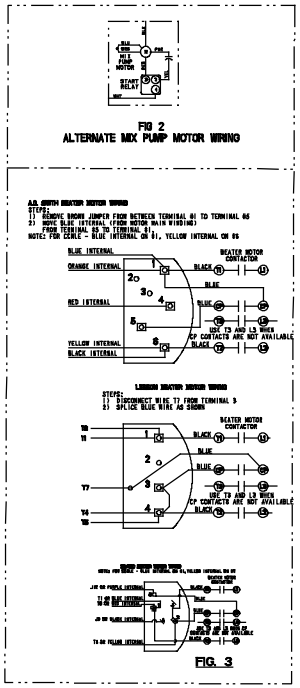
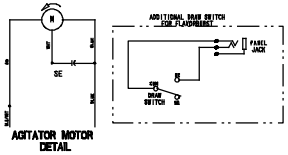


FIG 2
ALTERNATE MIX PUMP MOTOR WIRING

FIG. 3

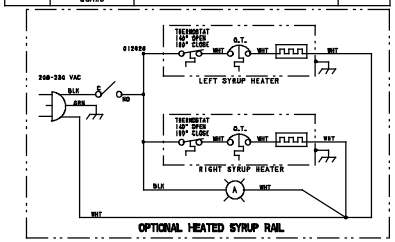


AGITATOR MOTOR DETAIL

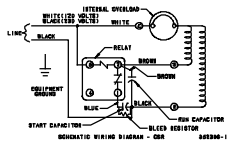
JUMPER SETTINGS

	UVC4 BOARD	FUNCTION	JUMPER INSTALLED INITIALLY
JP1	PINS 1 AND 2	JUMPER INSTALLED- BARREL AND HOPPER TEMPERATURES ARE CHECKED DURING AUTO/STANDBY. UNIT IS LOCKED OUT IF EITHER BARREL OR HOPPER IS TOO WARM FOR A PERIOD OF TIME. LOCKOUT OCCURS WHEN BARREL OR HOPPER IS ABOVE 45°F (7°C) FOR MORE THAN ONE HOUR OR ABOVE 41°F (5°C) FOR MORE THAN FOUR HOURS.	YES
		NO JUMPER INSTALLED-NO LOCKOUT DURING AUTO/STANDBY IF BARREL OR HOPPER IS TOO WARM FOR A PERIOD OF TIME.	
	PINS 3 AND 4	RESERVED (DO NOT USE)	NO
JP2	PINS 1 AND 2	DOMESTIC CONFIGURATION-JUMPER INSTALLED. HOPPER TEMPERATURE NOT DISPLAYED ON SCREEN/HEAT SYMBOL KEYS ONLY ACTIVE WHEN A LOCKOUT CONDITION HAS OCCURRED/ STANDBY KEYS DISABLED.	YES
		INTERNATIONAL CONFIGURATION-NO JUMPER INSTALLED. HOPPER TEMPERATURES DISPLAYED ON SCREEN/MANUAL HEAT CYCLE START BY SELECTING HEAT SYMBOL/STANDBY KEYS FUNCTIONAL.	
JP3		RESERVED (DO NOT USE)	NO
JP4		RESERVED (DO NOT USE)	NO
JP5		RESERVED (DO NOT USE)	NO
JP6		RESERVED (DO NOT USE)	NO
JP7		JUMPER INSTALLED DISABLES RESET.	NO
RTCK		RESERVED (DO NOT USE)	NO
DBGEN		RESERVED (DO NOT USE)	NO

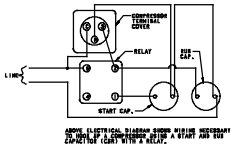
	INTERFACE BOARD	FUNCTION	JUMPER INSTALLED INITIALLY
W1		RESERVED (DO NOT USE)	NO
W2		JUMPER INSTALLED-FORCE BRUSH CLEAN STATUS.	NO
W3		RESERVED (DO NOT USE)	NO
W4		JUMPER INSTALLED-OPEN ALL SOLENOIDS.	NO
W5		RESERVED (DO NOT USE)	NO
W6		JUMPER INSTALLED-REDUCED MIX LOW SENSITIVITY.	NO
W7		JUMPER INSTALLED-REDUCED MIX OUT SENSITIVITY.	NO
J10	PINS 1 & 2	JUMPER INSTALLED-ENABLES 39°F HOPPER TEMPERATURE CHECK.	YES
	PINS 7 & 8	JUMPER INSTALLED W/SWITCH-SELF SERVE APPLICATION ONLY. LOCKS OUT TOUCH PANEL. NEW SWITCH ACTS AS THE ON/OFF ABILITY TO ACTIVATE THE TOUCH PANEL.	NO
A	SOFT SERVE PERSONALITY BOARD	0-6 AMP BEATER MOTOR AMPERAGE RANGE	NO
B	SOFT SERVE PERSONALITY BOARD	0-12 AMP BEATER MOTOR AMPERAGE RANGE	YES



OPTIONAL HEATED SYRUP RAIL



SCHEMATIC WIRING DIAGRAM - CSD 883396-1



ABOVE ELECTRICAL DIAGRAM SHOWS WIRING NECESSARY TO CONVERT A COMPRESSOR WITH A START AND RUN CAPACITOR (CSR) WITH A RELAY.

NOTE:

1. STATIC ELECTRICITY MAY CAUSE DAMAGE TO SOLID STATE COMPONENTS. ELIMINATE STATIC ELECTRICITY BY TOUCHING GROUNDED UNIT BEFORE HANDLING SOLID STATE COMPONENTS.
2. RED WIRE ON RIBBON CABLES MUST BE CONNECTED TO PIN 1 AT EACH END.

GROUND FRAME SECURELY

Model C709
057010-27
4/12

S	96748	E98658H; ADDED OPTIONAL FAN PRESSURE SWITCH	01-25-06	MAH
R	97918	E98659G; A) ADDED SPINNER MOTOR SYMBOL	07/05/06	TLP
Q	100197	E98948G; WAS GHW	12/14/06	JMC
P	100264	E98 7819r A) ADD WIRING FOR DOOR SWITCH	03-06-07	MAH
O	100612	E98972C; UPDATE WIRING TO TO REMOVAL OF THE TEE HOT GAS BYPASS SOLENOID	10-9-07	MAH
N	104008	E98972G; ADDED JUMPER SETTINGS	12/14/07	DJH
K	110472	E98979C ADDED VIEW OPTIONAL HEATED SYRUP RAIL REVISED WIRING	05/16/10	LMC
L	117849	E98 10837r: SVC4 TO SVC5	8-21-11	MAL
M	120721	E98 11312r: Fig 13 UPDATE JUMPER TABLE	03-20-12	ACS

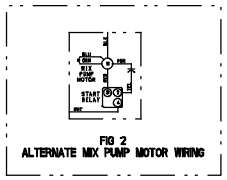
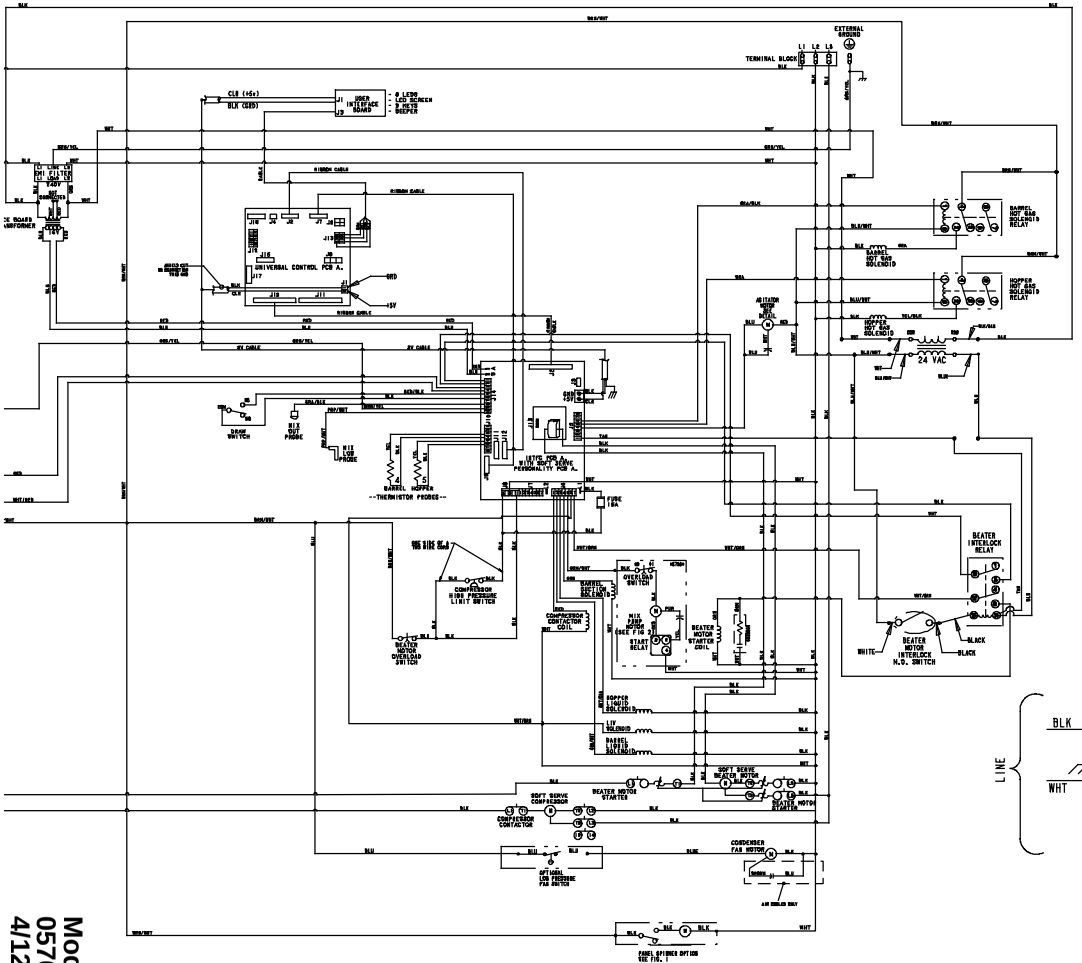
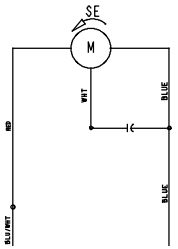
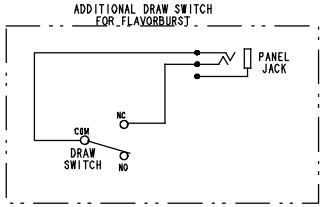


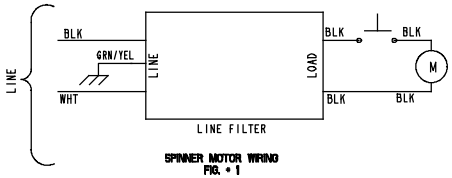
FIG 2
ALTERNATE MIX PUMP MOTOR WIRING





AGITATOR MOTOR DETAIL



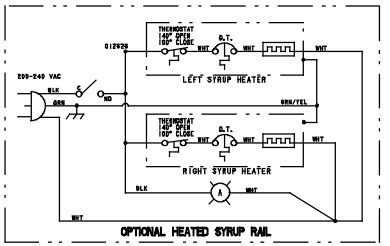


SPINNER MOTOR WIRING
FIG. # 1

JUMPER SETTINGS

	UVC4 BOARD	FUNCTION	JUMPER INSTALLED INITIALLY
JP1	PINS 1 AND 2	JUMPER INSTALLED- BARREL AND HOPPER TEMPERATURES ARE CHECKED DURING AUTO/STANDBY. UNIT IS LOCKED OUT IF EITHER BARREL OR HOPPER IS TOO WARM FOR A PERIOD OF TIME. LOCKOUT OCCURS WHEN BARREL OR HOPPER IS ABOVE 45°F (7°C) FOR MORE THAN ONE HOUR OR ABOVE 41°F (5°C) FOR MORE THAN FOUR HOURS.	YES
		NO JUMPER INSTALLED-NO LOCKOUT DURING AUTO/STANDBY IF BARREL OR HOPPER IS TOO WARM FOR A PERIOD OF TIME.	
	PINS 3 AND 4	RESERVED (DO NOT USE)	NO
JP2	PINS 1 AND 2	DOMESTIC CONFIGURATION-JUMPER INSTALLED. HOPPER TEMPERATURE NOT DISPLAYED ON SCREEN/HEAT SYMBOL KEYS ONLY ACTIVE WHEN A LOCKOUT CONDITION HAS OCCURRED/ STANDBY KEYS DISABLED.	YES
		INTERNATIONAL CONFIGURATION-NO JUMPER INSTALLED. HOPPER TEMPERATURES DISPLAYED ON SCREEN/MANUAL HEAT CYCLE START BY SELECTING HEAT SYMBOL/STANDBY KEYS FUNCTIONAL.	
JP3		RESERVED (DO NOT USE)	NO
JP4		RESERVED (DO NOT USE)	NO
JP5		RESERVED (DO NOT USE)	NO
JP6		RESERVED (DO NOT USE)	NO
JP7		JUMPER INSTALLED DISABLES RESET.	NO
RTCK		RESERVED (DO NOT USE)	NO
DBGEN		RESERVED (DO NOT USE)	NO

	INTERFACE BOARD	FUNCTION	JUMPER INSTALLED INITIALLY
W1		RESERVED (DO NOT USE)	NO
W2		JUMPER INSTALLED-FORCE BRUSH CLEAN STATUS.	NO
W3		RESERVED (DO NOT USE)	NO
W4		JUMPER INSTALLED-OPEN ALL SOLENOIDS.	NO
W5		RESERVED (DO NOT USE)	NO
W6		JUMPER INSTALLED-REDUCED MIX LOW SENSITIVITY.	NO
W7		JUMPER INSTALLED-REDUCED MIX OUT SENSITIVITY.	NO
J10	PINS 1 & 2	JUMPER INSTALLED-ENABLES 59°F HOPPER TEMPERATURE CHECK.	YES
	PINS 7 & 8	JUMPER INSTALLED W/SWITCH-SELF SERVE APPLICATION ONLY. LOCKS OUT TOUCH PANEL. NEW SWITCH ACTS AS THE ON/OFF ABILITY TO ACTIVATE THE TOUCH PANEL.	NO
A	SOFT SERVE PERSONALITY BOARD	0-6 AMP BEATER MOTOR AMPERAGE RANGE	NO
B	SOFT SERVE PERSONALITY BOARD	0-12 AMP BEATER MOTOR AMPERAGE RANGE	YES



OPTIONAL HEATED SYRUP RAIL

GROUND FRAME SECURELY

NOTE:
1. STATIC ELECTRICITY MAY CAUSE DAMAGE TO SOLID STATE COMPONENTS. ELIMINATE STATIC ELECTRICITY BY TOUCHING GROUNDED UNIT BEFORE HANDLING SOLID STATE COMPONENTS.
2. RED WIRE ON RIBBON CABLES MUST BE CONNECTED TO PIN 1 AT EACH END.

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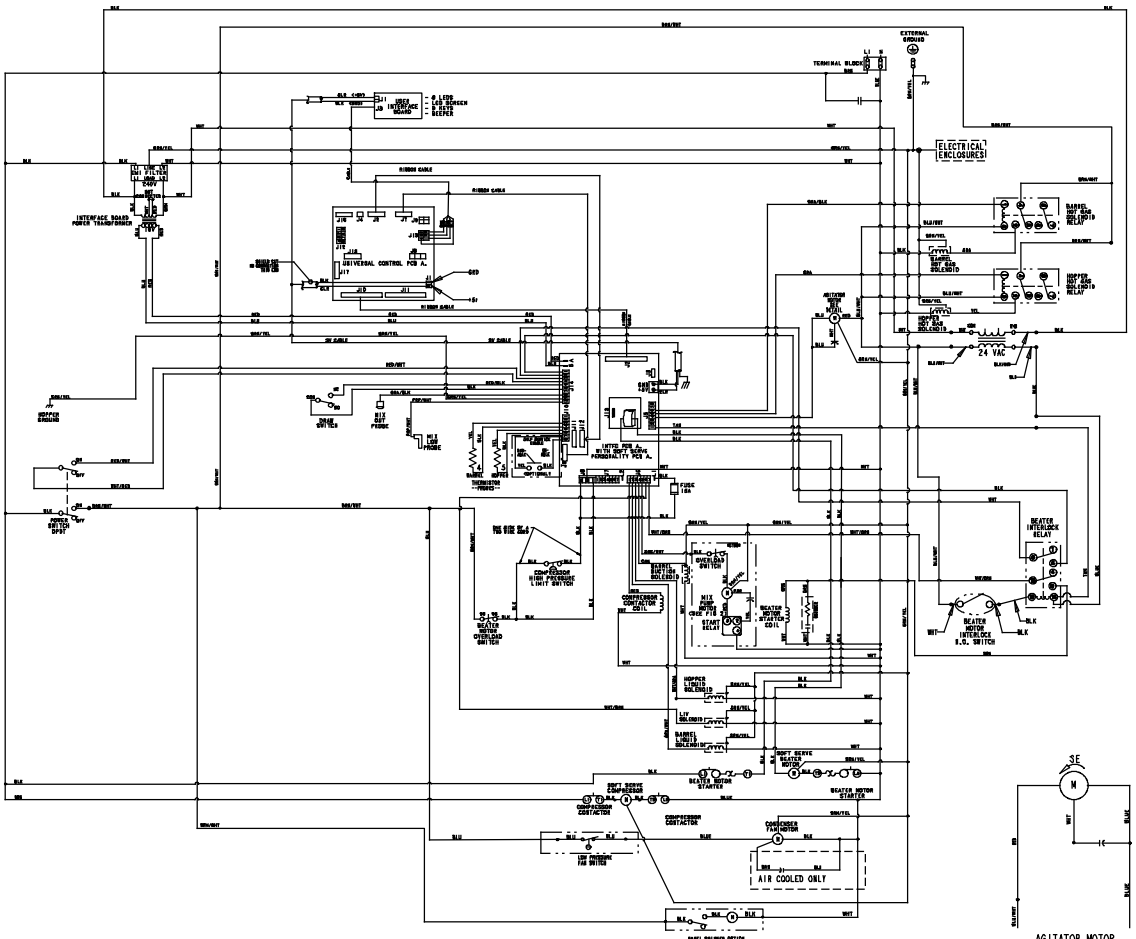
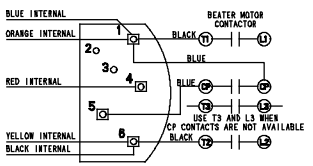


FIG 2
ALTERNATE MIX PUMP MOTOR WIRING

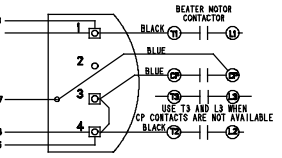
A.O. SMITH BEATER MOTOR WIRING

STEPS:
1) REMOVE BROWN JUMPER FROM BETWEEN TERMINAL #1 TO TERMINAL #5
2) MOVE BLUE INTERNAL (FROM MOTOR MAIN WINDING) FROM TERMINAL #5 TO TERMINAL #1.
NOTE: FOR CCW/LE - BLUE INTERNAL ON #1, YELLOW INTERNAL ON #6



LEESON BEATER MOTOR WIRING

STEPS:
1) DISCONNECT WIRE T7 FROM TERMINAL 3
2) SPLICE BLUE WIRE AS SHOWN



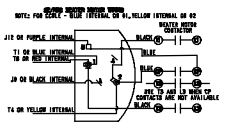
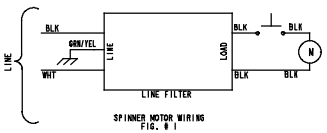


FIG. 3

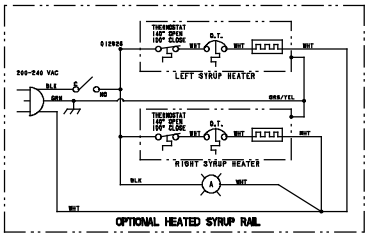


SPINNER MOTOR WIRING
FIG. # 1

JUMPER SETTINGS

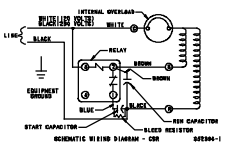
	UVC4 BOARD	FUNCTION	JUMPER INSTALLED INITIALLY
JP1	PINS 1 AND 2	JUMPER INSTALLED- BARREL AND HOPPER TEMPERATURES ARE CHECKED DURING AUTO/STANDBY. UNIT IS LOCKED OUT IF EITHER BARREL OR HOPPER IS TOO WARM FOR A PERIOD OF TIME. LOCKOUT OCCURS WHEN BARREL OR HOPPER IS ABOVE 45°F (7°C) FOR MORE THAN ONE HOUR OR ABOVE 41°F (5°C) FOR MORE THAN FOUR HOURS.	YES
		NO JUMPER INSTALLED-NO LOCKOUT DURING AUTO/STANDBY IF BARREL OR HOPPER IS TOO WARM FOR A PERIOD OF TIME.	
	PINS 3 AND 4	RESERVED (DO NOT USE)	NO
JP2	PINS 1 AND 2	DOMESTIC CONFIGURATION-JUMPER INSTALLED. HOPPER TEMPERATURE NOT DISPLAYED ON SCREEN/HEAT SYMBOL KEYS ONLY ACTIVE WHEN A LOCKOUT CONDITION HAS OCCURRED/ STANDBY KEYS DISABLED.	NO
		INTERNATIONAL CONFIGURATION-NO JUMPER INSTALLED. HOPPER TEMPERATURES DISPLAYED ON SCREEN/MANUAL HEAT CYCLE START BY SELECTING HEAT SYMBOL/STANDBY KEYS FUNCTIONAL.	
JP3		RESERVED (DO NOT USE)	NO
JP4		RESERVED (DO NOT USE)	NO
JP5		RESERVED (DO NOT USE)	NO
JP6		RESERVED (DO NOT USE)	NO
JP7		JUMPER INSTALLED DISABLES RESET.	NO
RTCK		RESERVED (DO NOT USE)	NO
DBGEN		RESERVED (DO NOT USE)	NO

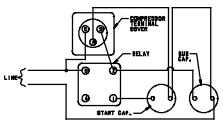
	INTERFACE BOARD	FUNCTION	JUMPER INSTALLED INITIALLY
W1		RESERVED (DO NOT USE)	NO
W2		JUMPER INSTALLED-FORCE BRUSH CLEAN STATUS.	NO
W3		RESERVED (DO NOT USE)	NO
W4		JUMPER INSTALLED-OPEN ALL SOLENOIDS.	NO
W5		RESERVED (DO NOT USE)	NO
W6		JUMPER INSTALLED-REDUCED MIX LOW SENSITIVITY.	NO
W7		JUMPER INSTALLED-REDUCED MIX OUT SENSITIVITY.	NO
J10	PINS 1 & 2	JUMPER INSTALLED-ENABLES 50°F HOPPER TEMPERATURE CHECK.	YES
	PINS 7 & 8	JUMPER INSTALLED W/SWITCH-SELF SERVE APPLICATION ONLY. LOCKS OUT TOUCH PANEL. NEW SWITCH ACTS AS THE ON/OFF ABILITY TO ACTIVATE THE TOUCH PANEL.	NO
A	SOFT SERVE PERSONALITY BOARD	0-6 AMP BEATER MOTOR AMPERAGE RANGE	NO
B	SOFT SERVE PERSONALITY BOARD	0-12 AMP BEATER MOTOR AMPERAGE RANGE	YES



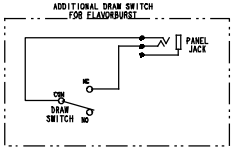
OPTIONAL HEATED SYRUP RAIL

GROUND FRAME SECURELY





ABOVE ELECTRICAL DIAGRAM SHOWS WIRING NECESSARY TO HOOK UP A COMPRESSOR USING A START AND RUN CAPACITOR (CSR) WITH A RELAY.



NOTE:

1. STATIC ELECTRICITY MAY CAUSE DAMAGE TO SOLID STATE COMPONENTS. ELIMINATE STATIC ELECTRICITY BY TOUCHING GROUNDED UNIT BEFORE HANDLING SOLID STATE COMPONENTS.
2. RED WIRE ON RIBBON CABLES MUST BE CONNECTED TO PIN 1 AT EACH END.

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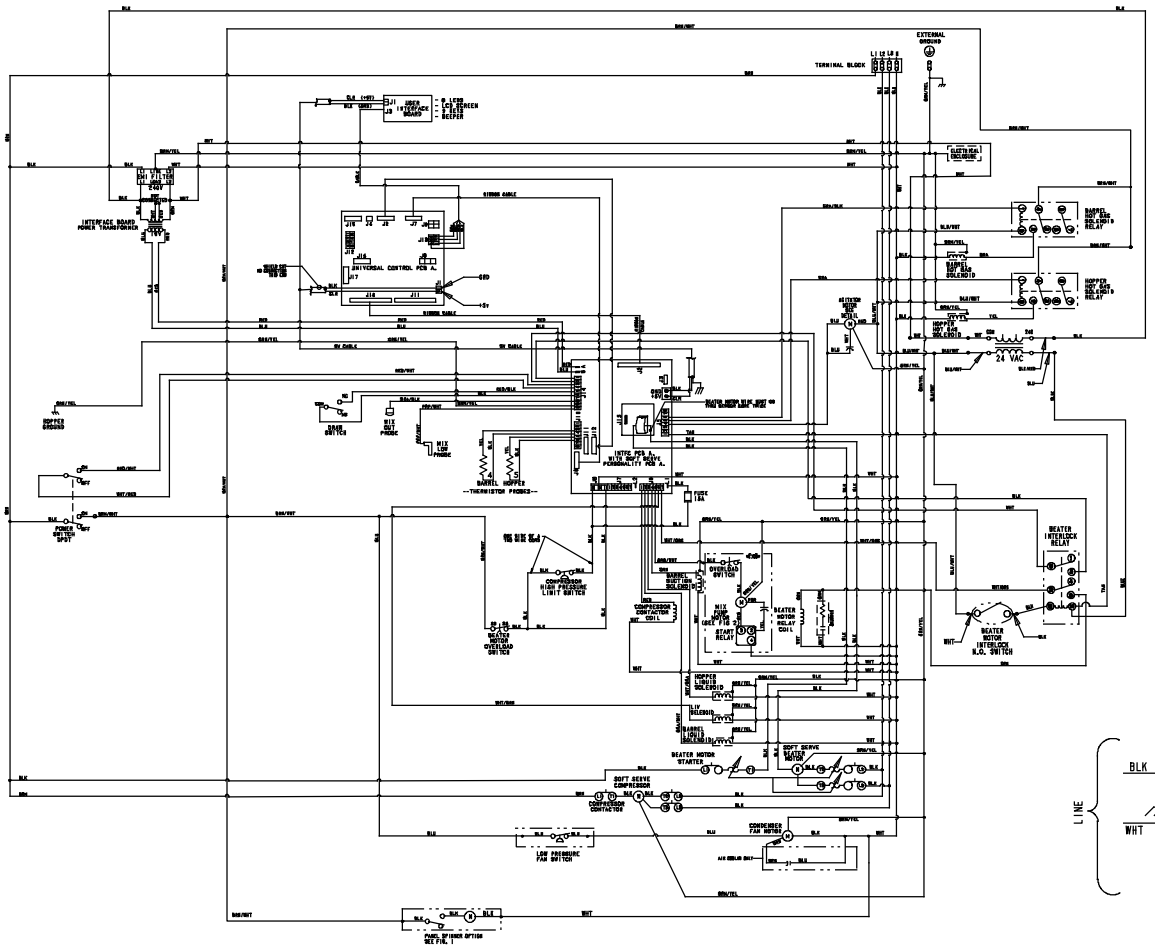


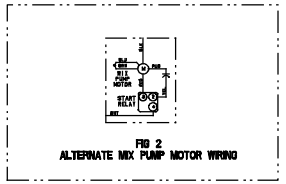
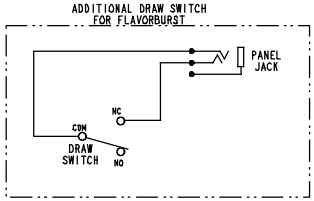
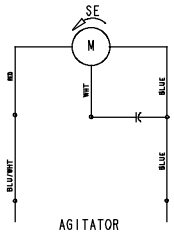
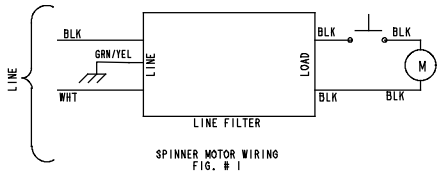


FIG 2
ALTERNATE MIX PUMP MOTOR WIRING





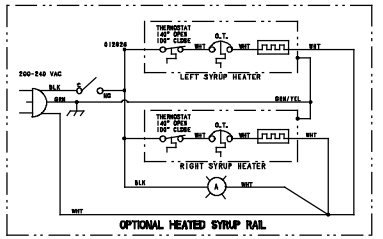


SPINNER MOTOR WIRING
FIG. # 1

JUMPER SETTINGS

	UVC4 BOARD	FUNCTION	JUMPER INSTALLED INITIALLY
JP1	PINS 1 AND 2	JUMPER INSTALLED- BARREL AND HOPPER TEMPERATURES ARE CHECKED DURING AUTO/STANDBY. UNIT IS LOCKED OUT IF EITHER BARREL OR HOPPER IS TOO WARM FOR A PERIOD OF TIME. LOCKOUT OCCURS WHEN BARREL OR HOPPER IS ABOVE 45°F (7°C) FOR MORE THAN ONE HOUR OR ABOVE 41°F (5°C) FOR MORE THAN FOUR HOURS.	YES
		NO JUMPER INSTALLED-NO LOCKOUT DURING AUTO/STANDBY IF BARREL OR HOPPER IS TOO WARM FOR A PERIOD OF TIME.	
	PINS 3 AND 4	RESERVED (DO NOT USE)	NO
JP2	PINS 1 AND 2	DOMESTIC CONFIGURATION-JUMPER INSTALLED. HOPPER TEMPERATURE NOT DISPLAYED ON SCREEN/HEAT SYMBOL KEYS ONLY ACTIVE WHEN A LOCKOUT CONDITION HAS OCCURRED/ STANDBY KEYS DISABLED.	NO
		INTERNATIONAL CONFIGURATION-NO JUMPER INSTALLED. HOPPER TEMPERATURES DISPLAYED ON SCREEN/MANUAL HEAT CYCLE START BY SELECTING HEAT SYMBOL/STANDBY KEYS FUNCTIONAL.	
JP3		RESERVED (DO NOT USE)	NO
JP4		RESERVED (DO NOT USE)	NO
JP5		RESERVED (DO NOT USE)	NO
JP6		RESERVED (DO NOT USE)	NO
JP7		JUMPER INSTALLED DISABLES RESET.	NO
RTCK		RESERVED (DO NOT USE)	NO
DBGEN		RESERVED (DO NOT USE)	NO

	INTERFACE BOARD	FUNCTION	JUMPER INSTALLED INITIALLY
W1		RESERVED (DO NOT USE)	NO
W2		JUMPER INSTALLED-FORCE BRUSH CLEAN STATUS.	NO
W3		RESERVED (DO NOT USE)	NO
W4		JUMPER INSTALLED-OPEN ALL SOLENOIDS.	NO
W5		RESERVED (DO NOT USE)	NO
W6		JUMPER INSTALLED-REDUCED MIX LOW SENSITIVITY.	NO
W7		JUMPER INSTALLED-REDUCED MIX OUT SENSITIVITY.	NO
J10	PINS 1 & 2	JUMPER INSTALLED-ENABLES 59°F HOPPER TEMPERATURE CHECK.	YES
	PINS 7 & 8	JUMPER INSTALLED W/SWITCH-SELF SERVE APPLICATION ONLY. LOCKS OUT TOUCH PANEL. NEW SWITCH ACTS AS THE ON/OFF ABILITY TO ACTIVATE THE TOUCH PANEL.	NO
A	SOFT SERVE PERSONALITY BOARD	0-6 AMP BEATER MOTOR AMPERAGE RANGE	NO
B	SOFT SERVE PERSONALITY BOARD	0-12 AMP BEATER MOTOR AMPERAGE RANGE	YES



OPTIONAL HEATED SYRUP RAIL

GROUND FRAME SECURELY

NOTE:

1. STATIC ELECTRICITY MAY CAUSE DAMAGE TO SOLID STATE COMPONENTS. ELIMINATE STATIC ELECTRICITY BY TOUCHING GROUNDED UNIT BEFORE HANDLING SOLID STATE COMPONENTS.
2. RED WIRE ON RIBBON CABLES MUST BE CONNECTED TO PIN 1 AT EACH END.

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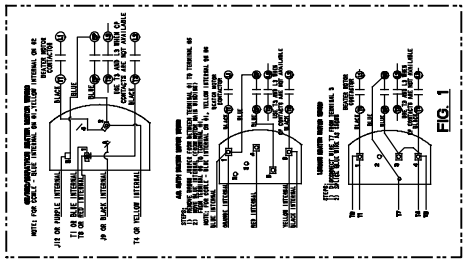

FIG. 1

FIG. 4

NOTE:

1. STATIC ELECTRICITY MAY CAUSE DAMAGE TO SOLID STATE COMPONENTS. ELIMINATE STATIC ELECTRICITY BY TOUCHING GROUNDED UNIT BEFORE HANDLING SOLID STATE COMPONENTS.
2. RED WIRE ON RIBBON CABLES MUST BE CONNECTED TO PIN 1 AT EACH END.

19	44469	E30006BE: ADDED WIRE TO CORRECT HEATER MOTOR OVERLOAD TRIPPING ON 3 PIN CONNECTOR W.I.	07/07/14	RAH
18	44464	E30001HE2: ADDED JUMPER J4-5 ON THE SOFT SERVE PERSONALITY BOARD	4-1-14	RAH
14	44448	E30 002EE: LOGI REVISED WAND SWITCHES. JUMPER J5&J6 A SLAVED TO AC CONTACT.	10-12-13	RAH
13	100972	E30 004EE: ADDED SAFETY STROBE AT GEAR/DEL SIDE OF THE BEATER MOTOR.	02-22-07	TA
16	102280	E30011HEw: UPDATED WIRING TO KIT FILTER	9-14-11	RAH
11	104054	E30 1102-P1: A) ADDED MATING WIRE FROM LEFT PANEL J4-1 (FILTER) TO J4-2 (FILTER) B) ADDED LEFT & RIGHT PRESSURE SWITCHES	04-02-08	TA
10	111382	E30 011-P1: A) REV'D (1) EXTERNAL GROUND	9-24-09	TCB
9	110955	E30 010G: UPDATE THE SYRUP DISC	7-21-10	RAH
7	117794	E30 1005E: ADDED OPTIONAL SELF-SERVICE CABLE W/SWITCH, SEE E30 1005E W.I. #1.	9-29-11	MAL
8	117896	E30 1002-P1: 1) MAE ECO	7/6/11	MAB
V	120661	E30 1101Rp4: REVISED JUMPER FUNCTION TABLE	3-26-12	PPA

JUMPER SETTINGS

UVC4 BOARD		FUNCTION	JUMPER INSTALLED INITIALLY
JP1	PINS 1 AND 2	JUMPER INSTALLED - BARREL AND HOPPER TEMPERATURES ARE CHECKED DURING AUTO/STANDBY. UNIT IS LOCKED OUT IF EITHER BARREL OR HOPPER IS TOO WARM FOR A PERIOD OF TIME. LOCKOUT OCCURS WHEN BARREL OR HOPPER IS ABOVE 45F(7C) FOR MORE THAN ONE HOUR OR ABOVE 41F(5C) FOR MORE THAN FOUR HOURS.	YES
		NO JUMPER INSTALLED - NO LOCKOUT DURING AUTO/STANDBY IF BARREL OR HOPPER IS TOO WARM FOR A PERIOD OF TIME.	
	PINS 3 AND 4	RESERVED (DO NOT USE)	NO
JP2	PINS 1 AND 2	DOMESTIC CONFIGURATION - JUMPER INSTALLED. HOPPER TEMPERATURE NOT DISPLAYED ON SCREEN/HEAT SYMBOL KEYS ONLY ACTIVE WHEN A LOCKOUT CONDITION HAS OCCURRED/STANDBY KEYS DISABLED.	YES
		INTERNATIONAL CONFIGURATION - NO JUMPER INSTALLED. HOPPER TEMPERATURES DISPLAYED ON SCREEN/MANUAL HEAT CYCLE START BY SELECTING HEAT SYMBOL/STANDBY KEYS FUNCTIONAL.	
JP3		RESERVED (DO NOT USE)	NO
JP4		RESERVED (DO NOT USE)	NO
JP5		RESERVED (DO NOT USE)	NO
JP6		RESERVED (DO NOT USE)	NO
JP7		JUMPER INSTALLED DISABLES RESET.	NO
RTCK		RESERVED (DO NOT USE)	NO
DBGEN		RESERVED (DO NOT USE)	NO

LEFT INTERFACE BOARD		FUNCTION	JUMPER INSTALLED INITIALLY
W1		RESERVED (DO NOT USE)	NO
W2		JUMPER INSTALLED - FORCE BRUSH CLEAN STATUS.	NO
W3		JUMPER INSTALLED - ACTIVATES SYRUP HEATERS	NO*
W4		JUMPER INSTALLED - OPEN ALL LEFT SOLENOIDS.	NO
W5		RESERVED (DO NOT USE)	NO
W6		JUMPER INSTALLED - REDUCED MIX LOW SENSITIVITY.	NO
W7		JUMPER INSTALLED - REDUCED MIX OUT SENSITIVITY.	NO
J10	PINS 7 & 8	JUMPER INSTALLED W/SWITCH - SELF SERVE APPLICATION ONLY. LOCKS OUT TOUCH PANEL. NEW SWITCH ACTS AS THE ON/OFF ABILITY TO ACTIVATE THE TOUCH PANEL.	NO
A	SOFT SERVE PERSONALITY BOARD	0-6 AMP BEATER MOTOR AMPERAGE RANGE	NO
B	SOFT SERVE PERSONALITY BOARD	0-12 AMP BEATER MOTOR AMPERAGE RANGE	YES

RIGHT INTERFACE BOARD		FUNCTION	JUMPER INSTALLED INITIALLY
W1		RESERVED (DO NOT USE)	NO
W2		JUMPER INSTALLED - ENABLES 59F HOPPER TEMPERATURE CHECK.	YES
W3		RESERVED (DO NOT USE)	NO
W4		JUMPER INSTALLED - OPEN ALL RIGHT SOLENOIDS.	NO
W5		RESERVED (DO NOT USE)	NO
W6		JUMPER INSTALLED - REDUCED MIX LOW SENSITIVITY.	NO
W7		JUMPER INSTALLED - REDUCED MIX OUT SENSITIVITY.	NO
A	SOFT SERVE PERSONALITY BOARD	0-6 AMP BEATER MOTOR AMPERAGE RANGE	NO
B	SOFT SERVE PERSONALITY BOARD	0-12 AMP BEATER MOTOR AMPERAGE RANGE	YES

*IF THE UNIT HAS THE INTEGRAL SYRUP OPTION -403, THEN THIS JUMPER SHOULD BE INSTALLED.

GROUND FRAME SECURELY

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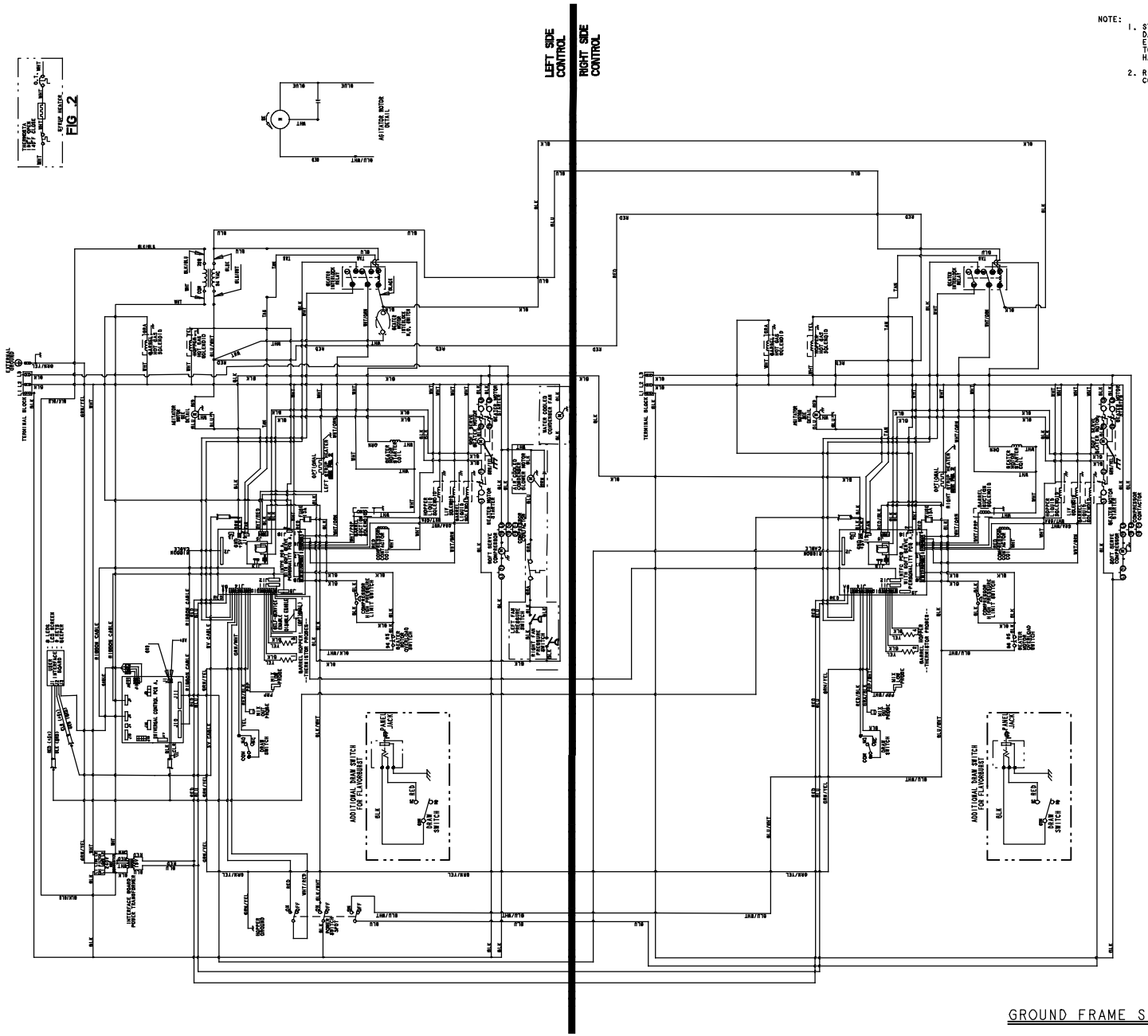
15	99627	EDM#99627: ADDED JUMPERS W1 & W2 TO THE SOFT SERVE PERSONALITY BOARD	8-1-06	KAH
14	99627	EDM #99627: ADDED SYRUP SHUT OFF VALVE, ADDED DIAGRAM 3, WIRED TO W/ CONTACTS	10-31-06	KAH
13	100947	CORRECTED TERMINAL BLOCK #'S & CHANGED TO A LONG 4 LOCT INTERFACE BOARD	2-9-07	KAH
12	100968	ECN 00422: ADDED CAPTIVE GROUND SCREW AT CONTROL PAN IN THE MIXING HOPPER	02-22-07	TA
11	103551	EDM#103551: UPDATED WIRING TO CNI FILTER	8-14-07	KAH
10	104973	EDM #104973: (P2 A) RIPPT WHT/ORN WIRE FROM WHITE SOCKET (P2-17) WHICH CONNECTS TO WHT/ORN WIRE FROM AUGER MOTOR CAP.	04-02-08	TA
9	111250	EDM #111250: A) REM'D (1) EXTERNAL GROUND	9-26-08	TCH
7	113666	EDM #113666: UPDATED SYRUP RAIL WIRING	08-28-10	CPS
8	117288	EDM #117288: ADDED OPTIONAL SELF-SERVICE ENABLE SWITCH, ENTER MATERIAL CONTROL #28-A.	9-23-11	WFL
V	117968	EDM #117968: (P1 & P2) WAS UNCD	7/8/11	KAH
W	120462	EDM #120462: REVISED JUMPER FUNCTION TABLE	9-26-12	PAA

NOTE:
1. STATIC ELECTRICITY MAY CAUSE DAMAGE TO SOLID STATE COMPONENTS. ELIMINATE STATIC ELECTRICITY BY TOUCHING GROUNDED UNIT BEFORE HANDLING SOLID STATE COMPONENTS.
2. RED WIRE ON RIBBON CABLES MUST BE CONNECTED TO PIN 1 AT EACH END.

FIG. 2



GROUND FRAME SECURELY

JUMPER SETTINGS

UVC4 BOARD		FUNCTION	JUMPER INSTALLED INITIALLY
JP1	PINS 1 AND 2	JUMPER INSTALLED - BARREL AND HOPPER TEMPERATURES ARE CHECKED DURING AUTO/STANDBY. UNIT IS LOCKED OUT IF EITHER BARREL OR HOPPER IS TOO WARM FOR A PERIOD OF TIME. LOCKOUT OCCURS WHEN BARREL OR HOPPER IS ABOVE 45F(7C) FOR MORE THAN ONE HOUR OR ABOVE 41F(5C) FOR MORE THAN FOUR HOURS.	YES
		NO JUMPER INSTALLED - NO LOCKOUT DURING AUTO/STANDBY IF BARREL OR HOPPER IS TOO WARM FOR A PERIOD OF TIME.	
	PINS 3 AND 4	RESERVED (DO NOT USE)	NO
JP2	PINS 1 AND 2	DOMESTIC CONFIGURATION - JUMPER INSTALLED. HOPPER TEMPERATURE NOT DISPLAYED ON SCREEN/HEAT SYMBOL KEYS ONLY ACTIVE WHEN A LOCKOUT CONDITION HAS OCCURRED/STANDBY KEYS DISABLED.	YES
		INTERNATIONAL CONFIGURATION - NO JUMPER INSTALLED. HOPPER TEMPERATURES DISPLAYED ON SCREEN/MANUAL HEAT CYCLE START BY SELECTING HEAT SYMBOL/STANDBY KEYS FUNCTIONAL.	
JP3		RESERVED (DO NOT USE)	NO
JP4		RESERVED (DO NOT USE)	NO
JP5		RESERVED (DO NOT USE)	NO
JP6		RESERVED (DO NOT USE)	NO
JP7		JUMPER INSTALLED DISABLES RESET.	NO
RTCK		RESERVED (DO NOT USE)	NO
DBGEN		RESERVED (DO NOT USE)	NO

LEFT INTERFACE BOARD		FUNCTION	JUMPER INSTALLED INITIALLY
W1		RESERVED (DO NOT USE)	NO
W2		JUMPER INSTALLED - FORCE BRUSH CLEAN STATUS.	NO
W3		JUMPER INSTALLED - ACTIVATES SYRUP HEATERS	NO*
W4		JUMPER INSTALLED - OPEN ALL LEFT SOLENOIDS.	NO
W5		RESERVED (DO NOT USE)	NO
W6		JUMPER INSTALLED - REDUCED MIX LOW SENSITIVITY.	NO
W7		JUMPER INSTALLED - REDUCED MIX OUT SENSITIVITY.	NO
J10	PINS 7 & 8	JUMPER INSTALLED W/SWITCH - SELF SERVE APPLICATION ONLY. LOCKS OUT TOUCH PANEL. NEW SWITCH ACTS AS THE ON/OFF ABILITY TO ACTIVATE THE TOUCH PANEL.	NO
A	SOFT SERVE PERSONALITY BOARD	0-6 AMP BEATER MOTOR AMPERAGE RANGE	NO
B	SOFT SERVE PERSONALITY BOARD	0-12 AMP BEATER MOTOR AMPERAGE RANGE	YES

RIGHT INTERFACE BOARD		FUNCTION	JUMPER INSTALLED INITIALLY
W1		RESERVED (DO NOT USE)	NO
W2		JUMPER INSTALLED - ENABLES 59F HOPPER TEMPERATURE CHECK.	YES
W3		RESERVED (DO NOT USE)	NO
W4		JUMPER INSTALLED - OPEN ALL RIGHT SOLENOIDS.	NO
W5		RESERVED (DO NOT USE)	NO
W6		JUMPER INSTALLED - REDUCED MIX LOW SENSITIVITY.	NO
W7		JUMPER INSTALLED - REDUCED MIX OUT SENSITIVITY.	NO
A	SOFT SERVE PERSONALITY BOARD	0-6 AMP BEATER MOTOR AMPERAGE RANGE	NO
B	SOFT SERVE PERSONALITY BOARD	0-12 AMP BEATER MOTOR AMPERAGE RANGE	YES

*IF THE UNIT HAS THE INTEGRAL SYRUP OPTION -405, THEN THIS JUMPER SHOULD BE INSTALLED.

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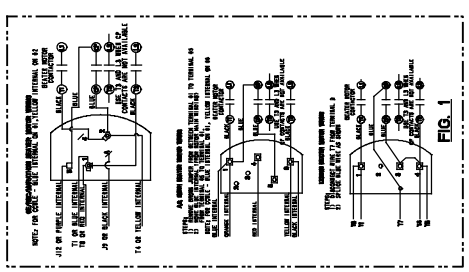
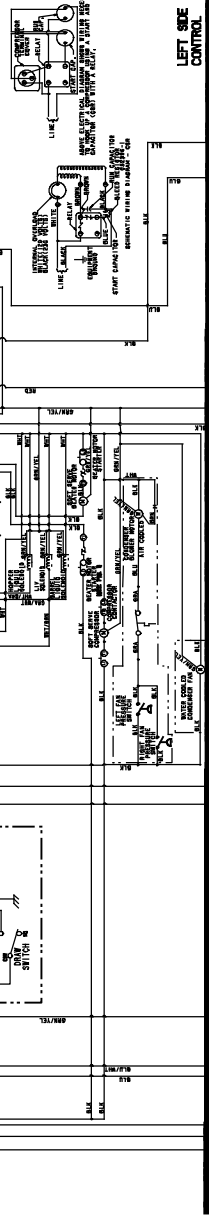


FIG. 1

FIG. 4



NOTE:

1. STATIC ELECTRICITY MAY CAUSE DAMAGE TO SOLID STATE COMPONENTS. ELIMINATE STATIC ELECTRICITY BY TOUCHING GROUNDED UNIT BEFORE HANDLING SOLID STATE COMPONENTS.
2. RED WIRE ON RIBBON CABLES MUST BE CONNECTED TO PIN 1 AT EACH END.

12	94108	SENSATEC MISC CHANGE. POWER SWITCH LINE TO MAGNETIC	8-29-03	CAZ
13	94212	CONFIGURATION CHANGE TO TO CONTROL BEATER MOTOR OPERATION WHEN USED IN A SELF SERVE APPLICATION.	2/27/04	BAM
14	94610	CONFIGURATION CHANGE TO ADD A 5 SEC TIME DELAY BEFORE ACTIVATING BEATER MOTOR.	9-1-05	BAM
15	95519	ECN 95519 ADDS A WATER VALVE OUTPUT, ADDS A SENSOR, A MOTOR, & A CAPACITOR.	10-19-06	KAC
16	97708	CONFIGURE SOFTWARE TO CONTROL BEATER MOTOR AMPERAGE RANGE.	10-27-06	BAM
17	163054	ECN 163054 UPDATE MINOR TO ENG FILTER	9-14-07	BAM
18	164099	ECN 164099 ADDS A WATER VALVE OUTPUT, ADDS A SENSOR, A MOTOR, & A CAPACITOR. ALSO ADDS A SECOND BEATER MOTOR OUTPUT.	04-02-08	TA
19	169098	CONFIGURE BEATER CONFIGURATION. UPGRADE SOFTWARE TO REV.	04/27/09	LSC
20	113011	ECN 97708, 94108 & 97110 REVISIONS. UPGRADE TO REV.	8-20-09	TCH
21	115059	ECN 97708 UPDATE THE SYRUP WIRE	7-27-10	PBS
9	117201	ECN 117201 ADDS CONTROL SELF SERVICE FLEXIBLE SYSTEM. ADDS PROVISIONS TO THE CONTROL FOR A SECOND BEATER MOTOR.	5-20-11	BR
8	117950	ECN 108071-Rev 11 DAS DVC3	7/8/11	ARH
X	129455	ECN 115179-Rev2 REVISED JUMPER FUNCTION TABLE	3-26-12	PBS

JUMPER SETTINGS

UVC4 BOARD		FUNCTION	JUMPER INSTALLED INITIALLY
JP1	PINS 1 AND 2	JUMPER INSTALLED - BARREL AND HOPPER TEMPERATURES ARE CHECKED DURING AUTO/STANDBY. UNIT IS LOCKED OUT IF EITHER BARREL OR HOPPER IS TOO WARM FOR A PERIOD OF TIME. LOCKOUT OCCURS WHEN BARREL OR HOPPER IS ABOVE 45F(7C) FOR MORE THAN ONE HOUR OR ABOVE 41F(5C) FOR MORE THAN FOUR HOURS.	YES
		NO JUMPER INSTALLED - NO LOCKOUT DURING AUTO/STANDBY IF BARREL OR HOPPER IS TOO WARM FOR A PERIOD OF TIME.	
	PINS 3 AND 4	RESERVED (DO NOT USE)	NO
JP2	PINS 1 AND 2	DOMESTIC CONFIGURATION - JUMPER INSTALLED. HOPPER TEMPERATURE NOT DISPLAYED ON SCREEN/HEAT SYMBOL KEYS ONLY ACTIVE WHEN A LOCKOUT CONDITION HAS OCCURRED/STANDBY KEYS DISABLED. INTERNATIONAL CONFIGURATION - NO JUMPER INSTALLED. HOPPER TEMPERATURES DISPLAYED ON SCREEN/MANUAL HEAT CYCLE START BY SELECTING HEAT SYMBOL/STANDBY KEYS FUNCTIONAL.	NO
JP3		RESERVED (DO NOT USE)	NO
JP4		RESERVED (DO NOT USE)	NO
JP5		RESERVED (DO NOT USE)	NO
JP6		RESERVED (DO NOT USE)	NO
JP7		JUMPER INSTALLED DISABLES RESET.	NO
RTCK		RESERVED (DO NOT USE)	NO
DBGEN		RESERVED (DO NOT USE)	NO

LEFT INTERFACE BOARD		FUNCTION	JUMPER INSTALLED INITIALLY
W1		RESERVED (DO NOT USE)	NO
W2		JUMPER INSTALLED - FORCE BRUSH CLEAN STATUS.	NO
W3		JUMPER INSTALLED - ACTIVATES SYRUP HEATERS	NO*
W4		JUMPER INSTALLED - OPEN ALL LEFT SOLENOIDS.	NO
W5		RESERVED (DO NOT USE)	NO
W6		JUMPER INSTALLED - REDUCED MIX LOW SENSITIVITY	NO
W7		JUMPER INSTALLED - REDUCED MIX OUT SENSITIVITY.	NO
J10	PINS 7 & 8	JUMPER INSTALLED W/SWITCH - SELF SERVE APPLICATION ONLY. LOCKS OUT TOUCH PANEL. NEW SWITCH ACTS AS THE ON/OFF ABILITY TO ACTIVATE THE TOUCH PANEL.	NO
A	SOFT SERVE PERSONALITY BOARD	0-6 AMP BEATER MOTOR AMPERAGE RANGE	NO
B	SOFT SERVE PERSONALITY BOARD	0-12 AMP BEATER MOTOR AMPERAGE RANGE	YES

RIGHT INTERFACE BOARD		FUNCTION	JUMPER INSTALLED INITIALLY
W1		RESERVED (DO NOT USE)	NO
W2		JUMPER INSTALLED - ENABLES 59F HOPPER TEMPERATURE CHECK.	YES
W3		RESERVED (DO NOT USE)	NO
W4		JUMPER INSTALLED - OPEN ALL RIGHT SOLENOIDS.	NO
W5		RESERVED (DO NOT USE)	NO
W6		JUMPER INSTALLED - REDUCED MIX LOW SENSITIVITY.	NO
W7		JUMPER INSTALLED - REDUCED MIX OUT SENSITIVITY.	NO
A	SOFT SERVE PERSONALITY BOARD	0-6 AMP BEATER MOTOR AMPERAGE RANGE	NO
B	SOFT SERVE PERSONALITY BOARD	0-12 AMP BEATER MOTOR AMPERAGE RANGE	YES

*IF THE UNIT HAS THE INTEGRAL SYRUP OPTION -405, THEN THIS JUMPER SHOULD BE INSTALLED.

FIG .4

NOTE:
1. STATIC ELECTRICITY MAY CAUSE COMPONENT FAILURE. TO ELIMINATE STATIC ELECTRICITY BY-TOUCHING GROUNDED UNIT BEFORE HANDLING SOLID STATE COMPONENTS.
2. RED WIRE ON RIBBON CABLES MUST BE CONNECTED TO PIN 1 AT EACH END.

JUMPER SETTINGS

UVC4 BOARD	FUNCTION	JUMPER INSTALLED INITIALLY
JP1 PINS 1 AND 2	JUMPER INSTALLED - BARREL AND HOPPER TEMPERATURES ARE CHECKED DURING AUTO/STANDBY. UNIT IS LOCKED OUT IF TEMPERATURE FAILURE OCCURS FOR A PERIOD OF TIME. LOCKOUT OCCURS WHEN BARREL OR HOPPER IS ABOVE 45F(7C) FOR MORE THAN FOUR HOURS.	YES
JP1 PINS 1 AND 2	NO JUMPER INSTALLED - NO LOCKOUT DURING AUTO/STANDBY IF BARREL OR HOPPER IS TOO WARM FOR A PERIOD OF TIME.	NO
JP1 PINS 3 AND 4	RESERVED (DO NOT USE)	NO
JP2 PINS 1 AND 2	DOMESTIC CONFIGURATION - JUMPER INSTALLED. HOPPER TEMPERATURE NOT DISPLAYED. SELECTED FUNCTIONS ONLY ACTIVE WHEN A LOCKOUT CONDITION HAS OCCURED/STANDBY KEYS DISABLED.	NO
JP2 PINS 1 AND 2	INTERNATIONAL CONFIGURATION - NO JUMPER INSTALLED. HOPPER TEMPERATURE DISPLAYED ON SCREEN/MANUAL HEAT CYCLE KEYS FUNCTIONAL.	NO
JP3	RESERVED (DO NOT USE)	NO
JP4	RESERVED (DO NOT USE)	NO
JP5	RESERVED (DO NOT USE)	NO
JP6	RESERVED (DO NOT USE)	NO
JP7	JUMPER INSTALLED DISABLES RESET.	NO
RTCH	RESERVED (DO NOT USE)	NO
BOOSER	RESERVED (DO NOT USE)	NO

LEFT INTERFACE BOARD	FUNCTION	JUMPER INSTALLED INITIALLY
W1	RESERVED (DO NOT USE)	NO
W2	JUMPER INSTALLED - FORCE BRUSH CLEAN STATUS.	NO
W3	HEATERS - INSTALLED - ACTIVATES STRUP HEATERS.	NO*
W4	JUMPER INSTALLED - OPEN ALL LEFT SOLENOIDS.	NO
W5	RESERVED (DO NOT USE)	NO
W6	JUMPER INSTALLED - REDUCED MILK LOW SENSITIVITY.	NO
W7	JUMPER INSTALLED - REDUCED MILK OUT SENSITIVITY.	NO
J10 PINS 7 & 8	JUMPER INSTALLED WITHOUT SELF SERVE APPLICATION ONLY. LOCKS OUT TOUCH PANEL. NEW SWITCH ACTS AS THE ON/OFF ABILITY TO ACTIVATE THE TOUCH PANEL.	NO
A	SOFT SERVE PERSONALITY BOARD	
B	PERSONALITY BOARD 0-12 AMP BEATER MOTOR AMPERAGE RANGE	YES

RIGHT INTERFACE BOARD	FUNCTION	JUMPER INSTALLED INITIALLY
W1	RESERVED (DO NOT USE)	NO
W2	JUMPER INSTALLED - ENABLES 5SF HOPPER TEMPERATURE CHECK.	YES
W3	RESERVED (DO NOT USE)	NO
W4	HEATERS - INSTALLED - OPEN ALL RIGHT SOLENOIDS.	NO
W5	RESERVED (DO NOT USE)	NO
W6	JUMPER INSTALLED - REDUCED MILK LOW SENSITIVITY.	NO
W7	JUMPER INSTALLED - REDUCED MILK OUT SENSITIVITY.	NO
A	SOFT SERVE PERSONALITY BOARD	
B	PERSONALITY BOARD 0-12 AMP BEATER MOTOR AMPERAGE RANGE	YES

*IF THE UNIT HAS THE INTEGRAL STRUP OPTION -403, THEN THIS JUMPER SHOULD BE INSTALLED.

REV	PART NO.	DESCRIPTION	ECN
M	112946	SCHEMATIC WIRE CHANGE, UPDATE WIRE LINE TO MARCH	24216
L	112944	SCHEMATIC WIRE CHANGE, UPDATE WIRE LINE TO MARCH	24216
K	112942	SCHEMATIC WIRE CHANGE, UPDATE WIRE LINE TO MARCH	24216
J	112940	SCHEMATIC WIRE CHANGE, UPDATE WIRE LINE TO MARCH	24216
H	112938	SCHEMATIC WIRE CHANGE, UPDATE WIRE LINE TO MARCH	24216
G	112936	SCHEMATIC WIRE CHANGE, UPDATE WIRE LINE TO MARCH	24216
F	112934	SCHEMATIC WIRE CHANGE, UPDATE WIRE LINE TO MARCH	24216
E	112932	SCHEMATIC WIRE CHANGE, UPDATE WIRE LINE TO MARCH	24216
D	112930	SCHEMATIC WIRE CHANGE, UPDATE WIRE LINE TO MARCH	24216
C	112928	SCHEMATIC WIRE CHANGE, UPDATE WIRE LINE TO MARCH	24216
B	112926	SCHEMATIC WIRE CHANGE, UPDATE WIRE LINE TO MARCH	24216
A	112924	SCHEMATIC WIRE CHANGE, UPDATE WIRE LINE TO MARCH	24216

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